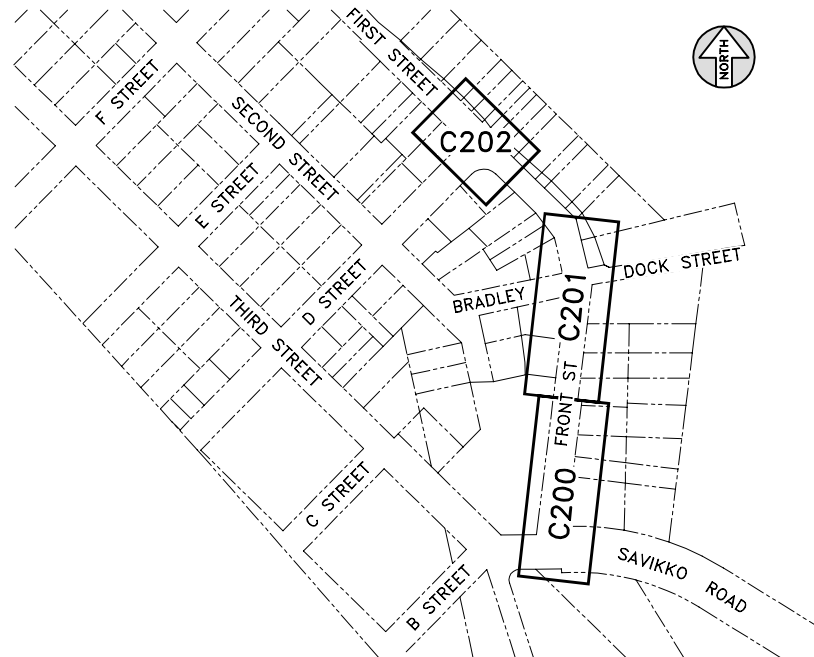


SHEET INDEX

SHEET No.	DESCRIPTION
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C301	PROFILE VIEW STA 12+90 to STA 16+00
C400	PAVEMENT LAYOUT & GRADING STA 10+00 to STA 15+85



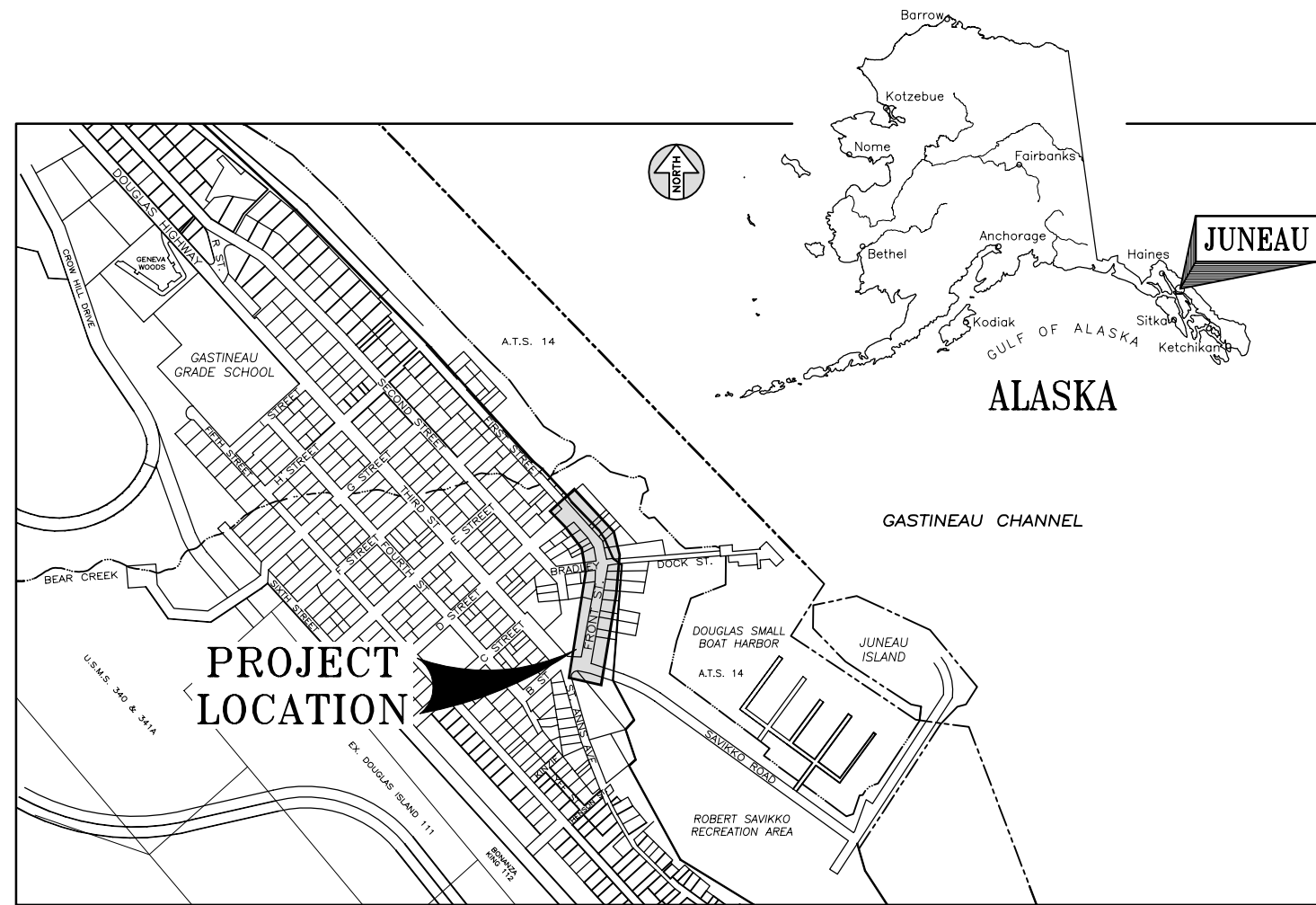
SHEET KEY MAP

N.T.S.

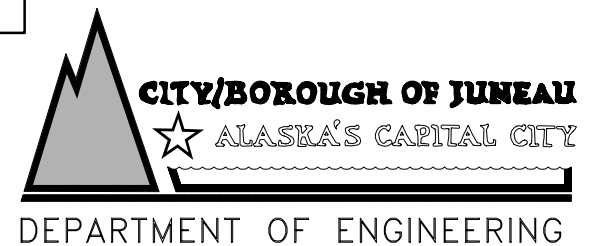
FRONT STREET DOUGLAS RECONSTRUCTION

CBJ CONTRACT No. E16-133

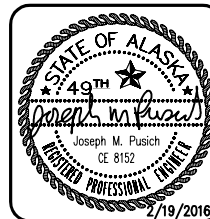
CITY & BOROUGH OF JUNEAU, ALASKA



PROJECT LOCATION MAP



COVER SHEET



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FRONT STREET DOUGLAS
RECONSTRUCTION
CBJ CONTRACT No. E16-133

CITY & BOROUGH OF JUNEAU, ALASKA

DATE: FEB 19, 2016
R&M NO. 15138JNSHEET
C001

GENERAL CONSTRUCTION NOTES

1. CBJ ENGINEERING STANDARD DETAILS BOOK FOR CIVIL ENGINEERING PROJECTS AND SUBDIVISION IMPROVEMENTS DATED AUGUST, 2011 AND CBJ ENGINEERING STANDARD SPECIFICATIONS DATED DECEMBER, 2003 ARE MADE A PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE.
2. LARGE BOULDERS, HARDPAN, STUMPS, LOGS, ORGANICS AND GROUND WATER MAY BE ENCOUNTERED AT VARIOUS DEPTHS DURING TRENCHING, DITCHING AND ROADWAY EXCAVATION OPERATIONS. THESE MATERIALS SHALL BE DISPOSED OF AS REQUIRED BY THE ENGINEER.
3. GRADES AND ALIGNMENTS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS AS APPROVED BY THE ENGINEER.
4. LOCATION OF WATER SYSTEM IMPROVEMENTS, SANITARY SEWER MANHOLES, STORM DRAIN CATCH BASINS, PIPING AND PIPE LENGTHS ARE SUBJECT TO MINOR REVISIONS AS APPROVED BY THE ENGINEER.
5. CONNECTIONS TO EXISTING SIDE STREETS AND DRIVEWAYS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. LOCATIONS OF EXISTING UNDERGROUND SEWER, WATER, TELEPHONE, CABLE TELEVISION, AND POWER UTILITIES SHOWN ON THESE PLANS WERE DERIVED FROM RECORD AS-BUILT DRAWINGS AND/OR FIELD LOCATES. ACTUAL LOCATIONS MAY VARY FROM THOSE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, PROTECTING AND MAINTAINING THE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. ANY DAMAGE RESULTING TO THESE UNDERGROUND UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. CALL "DIAL BEFORE YOU DIG" @ 586-1333 FOR UNDERGROUND UTILITY LOCATES PRIOR TO ANY EXCAVATION ACTIVITIES.
7. CONTRACTOR SHALL ASSURE GARBAGE PICKUP, DAILY MAIL SERVICE, FUEL AND SERVICE DELIVERIES WILL BE UNINTERRUPTED TO ALL RESIDENTS AND BUSINESSES AFFECTED BY THIS PROJECT.
8. PROPERTY LINE LOCATIONS USED IN THESE PLANS WERE DERIVED FROM RECORD PLATS AND DO NOT REPRESENT A BOUNDARY SURVEY.
9. ALL SIGN INSTALLATIONS OR RELOCATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (M.U.T.C.D.) WITH THE ALASKA SUPPLEMENT.
10. THE CONTRACTOR SHALL DELIVER ALL ASPHALT PAVEMENT REMOVED FROM THIS PROJECT TO A STOCKPILE AREA IN THE CBJ LEMON CREEK PIT. CONTACT THE ENGINEER FOR THE EXACT LOCATION OF THE STOCKPILE AREA.
11. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL SITE, EXCEPT AS NOTED IN THE CONTRACT DOCUMENTS.
12. PROVIDE KNOCKOUTS IN CATCH BASINS FOR ALL PIPES SHOWN ON THE PLANS.
13. ONLY HORIZONTAL ELBOW FITTINGS (BENDS) ARE SHOWN ON THE PLANS. ADDITIONAL FITTINGS WILL BE REQUIRED FOR VERTICAL DEFLECTIONS NEAR CONNECTION TO EXISTING PIPES, AND AT OTHER LOCATIONS REQUIRING GRADE CHANGES TO AVOID CONFLICTS.
14. THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT OR OPERATE EQUIPMENT WITH ITS TRACKS OR WHEELS PLACED ON PRIVATE PROPERTY WITHOUT THE WRITTEN APPROVAL OF THE PROPERTY OWNER.
15. THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES AT 780-6808 OF PROPOSED WATER SERVICE INTERRUPTION AND SUBMIT THE "WATER SYSTEM SPECIAL USE PERMIT" (COSIGNED BY THE ENGINEER) AT LEAST 48-HOURS PRIOR TO SHUTDOWN OR FLUSHING OF MAINLINE WATER PIPE. NO WATER SERVICE INTERRUPTION MAY PROCEED UNTIL THIS APPROVAL IS OBTAINED.
16. CONTRACTOR SHALL REFERENCE ALL EXISTING PROPERTY CORNER MONUMENTS (I.E. BRASS CAP MONUMENTS, REBARS OR CHISELED X'S) PRIOR TO CONSTRUCTION THAT WILL BE DISTURBED DURING HIS WORK, AND REMONUMENT AFTER CONSTRUCTION OPERATIONS. ALL WORK SHALL BE DONE BY, OR UNDER THE DIRECTION OF, AN ALASKA REGISTERED LAND SURVEYOR. ALL EXISTING PROPERTY CORNERS ARE NOT NECESSARILY SHOWN ON THE PLANS.
17. THE PLAN DRAWINGS DO NOT NECESSARILY SHOW ALL TREES AND SHRUBS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES. NO TREES, SHRUBS OR LANDSCAPING ARE TO BE REMOVED OR DAMAGED, UNLESS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.
18. AEL&P, ACS AND GCI MAY CONDUCT WORK WITHIN THE PROJECT LIMITS TO RELOCATE UTILITIES AND TO UPGRADE THEIR RESPECTIVE SYSTEMS. THE CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH EACH UTILITY COMPANY AND PROVIDE ACCESS AS NECESSARY FOR UTILITY COMPANIES TO COMPLETE THEIR WORK.
19. "JUMPING JACK", OR SIMILAR TYPE COMPACTORS SHALL BE USED FOR COMPACTION WITHIN 18-INCHES OF THE OUTSIDE SURFACE OF ALL WATER VALVE BOXES AND MANHOLES WITHIN THE STREET LIMITS.
20. THE USE OF GROUT AND QUICKSET CEMENT PRODUCTS WITH ADJUSTING RINGS, BRICKS, WOOD, STONES AND OTHER SIMILAR GRADE ADJUSTMENT DEVICES TO SUPPORT CATCH BASIN FRAMES OVER CATCH BASINS AND MANHOLES WILL NOT BE PERMITTED ON THIS PROJECT. SEE CBJ STANDARD SPECIFICATIONS, SECTION 02502 - STORM SEWER MANHOLES, INLETS AND CATCH BASINS AND THE DRAWINGS FOR CATCH BASIN FRAME SUPPORT REQUIREMENTS.
21. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ENGINEER APPROVED EROSION CONTROL DEVICES DURING CONSTRUCTION PER SECTION 01570 REQUIREMENTS.
22. TEMPORARY RAMPS SHALL BE PROVIDED AS REQUIRED FOR RESIDENT AND BUSINESS ACCESS TO THEIR DRIVEWAYS DURING THE CONSTRUCTION PERIOD.
23. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING WATER AND SEWER PIPES, INCLUDING ALL SERVICES ALONG THE STORM DRAIN AND WATER PIPE ALIGNMENTS TO DETERMINE PIPE INSULATION LOCATIONS AND TO ENSURE DAMAGE DOES NOT OCCUR TO THE SERVICE PIPES.
24. WATER PIPES WILL REQUIRE MORE THAN 60-INCHES OF COVER IN AREAS WHERE STORM DRAINAGE PIPES ARE CLOSE TO OR BELOW A DEPTH OF 60-INCHES TO INVERT. DEPTHS OF ALL STORM DRAINAGE PIPES SHALL BE DETERMINED PRIOR TO INSTALLING WATER PIPES TO ENSURE CONFLICTS BETWEEN THESE PIPES DO NOT OCCUR. A MINIMUM CLEARANCE OF 8-INCHES SHALL BE OBTAINED BETWEEN WATER AND OTHER PIPES.
25. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT AND BUSINESS OF EACH DRIVEWAY CLOSURE THE DAY PRECEDING THE CLOSURE. THE RESIDENT OR BUSINESS SHALL BE INFORMED OF THE PERIOD OF TIME THE CLOSURE WILL BE IN EFFECT. NO DRIVEWAY CLOSURES WILL BE PERMITTED UNTIL THIS REQUIREMENT HAS BEEN MET TO THE SATISFACTION OF THE ENGINEER.
26. TANNER'S SERVICE CENTER IS LOCATED WITHIN THE PROJECT LIMITS; THE CONTRACTOR IS REQUIRED TO COORDINATE WITH THE OWNER ON ALLOWING TRUCK AND BOAT TRAILER ACCESS TO THE SERVICE CENTER DURING BUSINESS HOURS. TANNER'S SERVICE CENTER SUMMER HOURS (APRIL 1 THROUGH SEPTEMBER 30) ARE TUESDAY - FRIDAY 9:00 AM TO 6:00 PM, SATURDAY 9:30 AM TO 3:00 PM, CLOSED SUNDAY AND MONDAY.

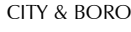
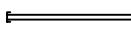
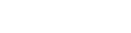
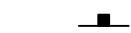
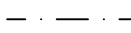
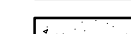
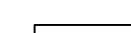
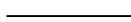
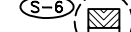
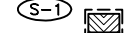
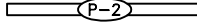
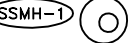
ABBREVIATIONS

AC	ASBESTOS CEMENT
ACS	ALASKA COMMUNICATIONS SYSTEMS
AEL&P	ALASKA ELECTRIC LIGHT & POWER
APPROX	APPROXIMATE
AST	ABOVEGROUND STORAGE TANK
BC	BACK OF CURB
BOP	BEGINNING OF PROJECT
CB	CATCH BASIN
CBJ	CITY & BOROUGH OF JUNEAU
CHB	CHORD BEARING
CHL	CHORD LENGTH
C/L	CENTERLINE
CIP	CAST IRON PIPE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONT	CONTINUOUS
CPP	CORRUGATED POLYETHYLENE PIPE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIP	DUCTILE IRON PIPE
DIA	DIAMETER
E	EASTING
EG	EXISTING GRADE
EJIW	EAST JORDAN IRON WORKS
EL	ELEVATION
EOP	END OF PROJECT
EP	EDGE OF PAVEMENT
EXIST	EXISTING
EXP	EXPANSION
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GCI	GENERAL COMMUNICATION INC.
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
IE	INVERT ELEVATION
L	LENGTH
LP	LOW POINT
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MJ	MECHANICAL JOINT
MTE	MATCH TO EXISTING
N	NORTHING
N/A	NOT APPLICABLE
NFS	NON-FROST SUSCEPTIBLE
NTS	NOT TO SCALE
NVC	NO VERTICAL CURVE
OC	ON CENTER
PC	POINT OF CURVATURE
PERF	PERFORATED
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
POC	POINT ON CURVE
POL	POINT ON LINE
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
RAP	RECYCLED ASPHALT PAVEMENT
ROW	RIGHT-OF-WAY
RP	RADIUS POINT
RT	RIGHT
SDMH	STORM DRAIN MANHOLE
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
T	TANGENT
TBM	TEMPORARY BENCH MARK
TBC	TOP BACK OF CURB
TC	TOP OF CONCRETE
TOB	TOP OF BANK
TOP	TOP OF PIPE
TYP	TYPICAL
UD	UNDERDRAIN
UNO	UNLESS NOTED OTHERWISE
UST	UNDERGROUND STORAGE TANK
VC	VERTICAL CURVE
VERT	VERTICAL
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W/	WITH

SYMBOLS

EXISTING

PROPOSED



PROPERTY / BOUNDARY LINE

UTILITY EASEMENT LINE

PROJECT BASELINE

TEMPORARY BENCH MARK

SANITARY SEWER MANHOLE

SANITARY SEWER LINE / SERVICE

STORM DRAIN PIPE

STORM DRAIN CATCH BASIN

STORM DRAIN MANHOLE

CURB & GUTTER, TYPE I

VALLEY GUTTER, TYPE III

ASPHALT SURFACE

CONCRETE SURFACE

SAWCUT AND MTE

WATER LINE

WATER VALVE BOX

FIRE HYDRANT

LIGHT POLE

ELECTRIC LINE UNDERGROUND

OVERHEAD UTILITY LINE

ELECTRIC TRANSFORMER

TELEPHONE LINE UNDERGROUND

CABLE TV LINE UNDERGROUND

FIBER OPTIC LINE UNDERGROUND

TOP OF BANK

TOE OF SLOPE

MAILBOX

SIGN

WOOD FENCE

CHAIN LINK FENCE

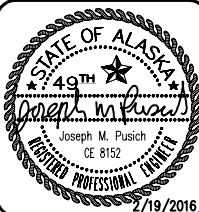
UNDERDRAIN

WALL DRAIN

DECIDUOUS TREE

STRUCTURE

GENERAL NOTES,
ABBREVIATIONS AND
SYMBOLS



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FRONT STREET DOUGLAS
RECONSTRUCTION
CBJ CONTRACT No. E16-133

CITY & BOROUGH OF JUNEAU, ALASKA

DATE: FEB 19, 2016
R&M NO. 15138JN

SHEET
C002

DESIGN JMP
DRAWN KAP/JAG
CHECK JMP
APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APRVD.

TABLE OF HORIZONTAL CONTROL			
POINT #	NORTHING	EASTING	DESCRIPTION
101	2,354,534.41	2,546,087.40	SURVEY SPIKE IN ASPHALT
109	2,354,098.95	2,546,259.26	SET REBAR, NO CAP
111	2,354,662.21	2,546,309.16	FOUND REBAR, NO CAP
112	2,354,801.69	2,546,193.74	FOUND REBAR, YELLOW PLASTIC CAP
312	2,355,177.26	2,545,431.41	DOT/PF CENTERLINE POL MONUMENT IN CASE
314	2,354,654.54	2,545,964.64	CBJ CENTERLINE MONUMENT IN CASE
500	2,354,585.68	2,546,328.67	BEAN PK NAIL IN CONCRETE
501	2,354,614.09	2,546,320.80	FOUND REBAR, NO CAP
503	2,354,423.49	2,546,266.49	BEAN SECONDARY MONUMENT

TABLE OF VERTICAL CONTROL				
TBM	NORTHING	EASTING	ELEVATION	DESCRIPTION
PP	2,354,799.--	2,545,792.--	61.66'	YELLOW SPIKE IN POWER POLE
FH-1	2,354,600.--	2,546,273.--	29.54'	E. BOLT TOP FLANGE OF FIRE HYDRANT
FH-2	2,354,099.--	2,546,243.--	36.65'	N. BOLT TOP FLANGE OF FIRE HYDRANT






NOTE: CONTRACTOR SHALL PERFORM A CLOSED LEVEL LOOP THROUGH TBM'S AS LISTED TO VERIFY ELEVATIONS PRIOR TO BEGINNING ANY GRADING WORK.

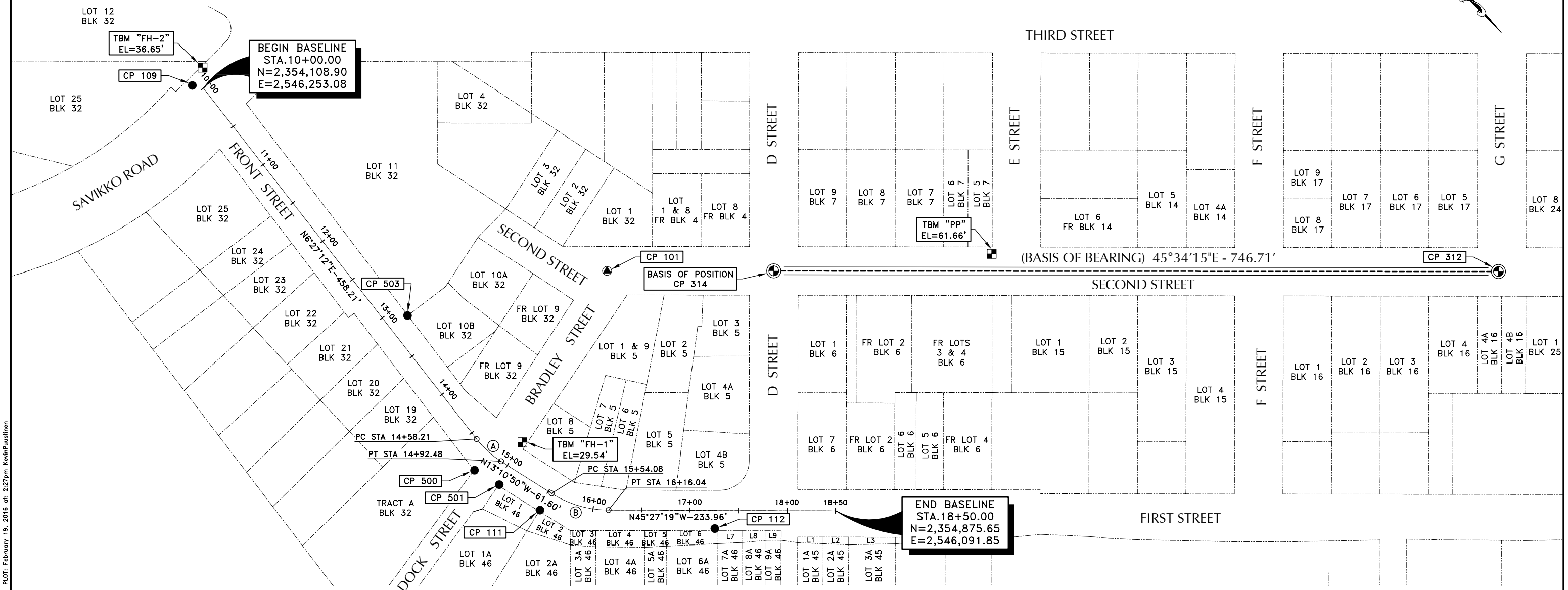
BASELINE CURVE SUMMARY					
CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHORD
(A)	19°38'02"	100.00'	17.30'	34.27'	N3°21'49"W-34.10'
(B)	32°16'28"	110.00'	31.83'	61.96'	N29°19'04"W-61.15'

GENERAL SURVEY NOTES

1. THE BASIS OF HORIZONTAL CONTROL UTILIZED TO CONDUCT THIS SURVEY WAS THE LINE-OF-SIGHT BETWEEN A CENTERLINE POL (POINT ON LINE) MONUMENT NEAR THE INTERSECTION OF SECOND AND "G" STREET AND THE CENTERLINE INTERSECTION MONUMENT AT SECOND AND "D" STREET HAVING A MEASURED BEARING OF S45°34'15"E.
2. THE BASIS OF VERTICAL CONTROL FOR THIS SURVEY WAS THE TBM (TEMPORARY BENCH MARK) EMPLOYED DURING THE 1985 CBJ SECOND STREET CONSTRUCTION IMPROVEMENT PROJECT BEING THE WESTERLY BOLT OF THE TOP FLANGE OF A FIRE HYDRANT AT THE INTERSECTION OF FIRST STREET AND DOUGLAS HIGHWAY. THIS POINT IS KNOWN AS "CBJ TBM #112" AND HAS THEN A REPORTED ELEVATION OF 101.05' MLLW.
3. DATE OF THIS SURVEY WAS OCTOBER 6th THROUGH OCTOBER 27th, 2015.
4. CONTRACTOR SHALL VERIFY ALL PROJECT CONTROL PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.

SURVEY CONTROL SYMBOLS

- | | |
|---|---------------------------------|
|  | CENTERLINE MONUMENT (RECOVERED) |
|  | PRIMARY MONUMENT (RECOVERED) |
|  | SECONDARY MONUMENT (RECOVERED) |
|  | 1" DIAMETER SURVEY SPIKE |
|  | TEMPORARY BENCH MARK (T.B.M.) |



DESIGN **JMP**

DRAWN **KAP/JAG**

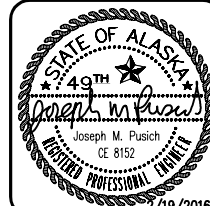
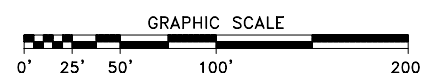
CHECK **JMP**

APPROVED **JMP**

FILE:

No.	DATE	REVISION	BY	APPRD.

SURVEY CONTROL MAP



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FRONT STREET DOUGLAS
RECONSTRUCTION
CBI CONTRACT No. E16-133

CITY & BOROUGH OF JUNEAU, ALASKA

DATE: FEB 19, 2016
 &M NO. 15138JN
 SHEET C003

SIGN ASSEMBLY TABLE

SIGN No.	LOCATION	MUTCD DESIGNATION	LEGEND AND REMARKS
①	10+44.6, 14.0 LT	R1-1	"STOP" (30"x30") & REUSE STREET NAME SIGNS
②	11+12.4, 17.1 RT	R2-1 & R7-1	"SPEED LIMIT 20" (24"x30") & "NO PARKING THIS SIDE OF STREET" (12"x18")
③	12+18.0, 13.2 LT	R7P-101R	"NO PARKING ANY TIME" W/ ARROW RIGHT (12"x18")
④	12+73.0, 13.2 LT	R7P-101L	"NO PARKING ANY TIME" W/ ARROW LEFT (12"x18")
⑤	13+13.3, 13.2 LT	R7P-101R	"NO PARKING ANY TIME" W/ ARROW RIGHT (12"x18")
⑥	13+84.0, 13.2 LT	R7P-101L	"NO PARKING ANY TIME" W/ ARROW LEFT (12"x18")
⑦	14+50.2, 26.7 LT	R1-1	"STOP" (30"x30") & REUSE STREET NAME SIGNS
⑧	14+99.4, 26.0 RT	R1-1	"STOP" (30"x30") & REUSE STREET NAME SIGNS
⑨	15+69.0, 14.0 RT	R7P-101L	"NO PARKING ANY TIME" W/ ARROW LEFT (12"x18")

NOTES:

- ALL SIGNS TO BE CONSTRUCTED IN ACCORDANCE WITH CBJ STANDARD DETAIL 127A.
- ALL SIGNS SHALL BE HIGH INTENSITY AND LOCATED AS DIRECTED BY THE ENGINEER.
- SALVAGE ALL EXISTING SIGN PANELS THAT ARE NOT BEING REUSED AND DELIVER TO CBJ STREET MAINTENANCE SHOP AT 7 MILE GLACIER HIGHWAY. DISPOSE OF ALL EXISTING POSTS, POST SOCKETS AND FOUNDATION MATERIALS.
- REPLACE ALL LOWER BRACKETS FOR STREET IDENTIFICATION PANELS. BRACKET BETWEEN PANELS MAY BE REUSED.
- ALL POSTS SHALL BE "TELSPAR", OR APPROVED EQUAL.
- TELSPAR POSTS SHALL BE PRE-PUNCHED WITH ALL KNOCKOUTS REMOVED.
- SALVAGE AND REINSTALL EXISTING STREET NAME SIGNS ABOVE NEW STOP SIGNS PER ABOVE TABLE.

NEW MAILBOX SUMMARY

STREET ADDRESS	MAILBOX LOCATION	REMARKS
903 FIRST STREET	15+69.0, 13.0 LT	SINGLE MAILBOX

NOTES:

- MAILBOX STATION & OFFSETS ARE GIVEN TO THE FRONT CENTER OF THE MAILBOX RECEPTACLE. CONTRACTOR SHALL STAKE MAILBOX LOCATION FOR APPROVAL BY THE ENGINEER PRIOR TO INSTALLATION.
- MAIL DELIVERY SERVICE SHALL NOT BE INTERRUPTED AND ACCESS TO EACH MAILBOX RECEPTACLE SHALL BE AVAILABLE TO THE UNITED STATES POSTAL SERVICE AND THE RESIDENTS AT ALL TIMES.

STORM DRAIN STRUCTURE FRAME & GRATE SUMMARY

STRUCTURE No.	EAST JORDAN IRON WORKS, OLYMPIC FOUNDRY INC., NEENAH FOUNDRY, CBJ STANDARD No., OR APPROVED EQUAL.
S-1	OLYMPIC FOUNDRY SM18DI
S-2	OLYMPIC FOUNDRY SM18DI
S-3	OLYMPIC FOUNDRY SM18DI
S-4	OLYMPIC FOUNDRY MH34SCDI
S-5	OLYMPIC FOUNDRY SM18DI
S-6	OLYMPIC FOUNDRY SM18DI
S-7	OLYMPIC FOUNDRY SM18DI
S-8	OLYMPIC FOUNDRY SM18DI
S-9	OLYMPIC FOUNDRY SM18DI
S-10	EJIW 7700 WITH M1 GRATE
S-11	EJIW 7700 WITH M1 GRATE
CB4	OLYMPIC FOUNDRY SM18DI

NOTES:

- CATCH BASIN TOP SLAB OPENINGS SHALL BE DIMENSIONED TO FIT THE FRAME DIMENSIONS. ALL GRATES SHALL BE HEAVY DUTY CONSTRUCTION AND BICYCLE SAFE. ALL FRAMES AND GRATES TO BE DUCTILE IRON.

SEWER & STORM STRUCTURE REMOVAL SUMMARY

LOCATION	REMARKS
10+16.3, 6.8 LT	REMOVE SSMH (M14)
10+42.8, 31.4 RT	REMOVE SSMH (M14.1)
11+16.1, 12.8 RT	REMOVE SSMH (M13)
13+17.7, 14.3 LT	REMOVE SDMH W/ CONC AREA DRAIN (CB1)
14+11.5, 14.6 LT	REMOVE CATCH BASIN (CB2)
14+12.2, 16.4 RT	REMOVE STORM DRAIN MANHOLE (CB3)
14+74.0, 0.6 RT	REMOVE SSMH (N15)
14+75.2, 9.4 RT	REMOVE SSMH (N14)
14+93.6, 10.2 RT	REMOVE SSMH (M15.1)
15+30.0, 20.0 LT	REMOVE CATCH BASIN (CB5)
15+33.0, 16.0 RT	REMOVE CATCH BASIN (CB6)
15+65.5, 2.5 RT	REMOVE SSMH (N15.1)
15+74.2, 5.6 RT	REMOVE SSMH (N15.3)
15+77.0, 13.2 RT	REMOVE SSMH (DIV1)
15+81.1, 0.5 LT	REMOVE SSMH (N15.2)
17+37.2, 14.5 LT	REMOVE CATCH BASIN
17+99.2, 14.7 LT	REMOVE CATCH BASIN

WATER SERVICE SUMMARY

STREET ADDRESS	STATION & OFFSET	SIZE/TYPE	REMARKS
802 FRONT STREET	11+24.1, 24.8 RT	2" CU	SEE NOTES 1, 2 & 4
LOT 24 FRONT STREET	11+73.0, 25.3 RT	1" CU	SEE NOTES 1 & 3
LOT 23 FRONT STREET	12+03.6, 25.6 RT	1" CU	SEE NOTES 1 & 3
808 FRONT STREET	12+24.7, 25.8 RT	1" CU	SEE NOTE 2
814 FRONT STREET	13+00.0, 19.2 RT	1" CU	SEE NOTES 1, 2 & 4
825 FRONT STREET	13+34.0, 21.1 LT	1" CU	SEE NOTES 1, 2 & 4
827 FRONT STREET	13+65.7, 20.8 LT	1" CU	SEE NOTES 1, 2 & 4
816 FRONT STREET	13+59.6, 19.8 RT	1" CU	SEE NOTES 1, 2 & 4
820 FRONT STREET	14+04.2, 19.8 RT	1" CU	SEE NOTES 1, 2 & 4
103 BRADLEY STREET	14+15.7, 21.1 LT	1" CU	SEE NOTES 1, 2 & 4
824 FRONT STREET	14+54.8, 20.8 RT	6" HDPE	SEE NOTES 1 & 3
903 FIRST STREET	15+06.1, 21.6 LT	1" CU	SEE NOTES 1, 2 & 4
106 DOCK STREET	15+43.8, 21.3 RT	1" CU	SEE NOTES 1, 2 & 4

NOTES:

- STATION & OFFSET ARE GIVEN TO CENTER OF CURB VALVE BOX.
- INSTALL NEW WATER SERVICE AND CURB BOX PER CBJ STANDARD DETAIL, CTE WATER SERVICE (NEW CURB BOX NOT REQUIRED AT 808 FRONT STREET).
- INSTALL NEW WATER SERVICE AND CURB BOX PER CBJ STANDARD DETAIL, NO CTE REQUIRED.
- PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.

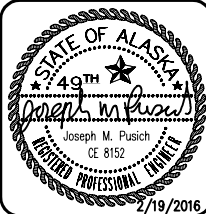
SEWER SERVICE SUMMARY

STREET ADDRESS	STATION & OFFSET	SIZE/TYPE	REMARKS
750 ST ANN'S AVENUE	9+93.7, 22.6 RT	6" PVC	SEE NOTES 1-3
N/A	10+47.8, 43.2 RT	6" PVC	SEE NOTE 2
802 FRONT STREET	11+13.8, 24.7 RT	6" PVC	SEE NOTES 1-3
802 THIRD STREET	11+53.8, 22.1 LT	10" PVC	SEE NOTES 1 & 3
LOT 24 FRONT STREET	11+77.0, 25.3 RT	6" PVC	SEE NOTE 2
LOT 23 FRONT STREET	12+09.6, 25.6 RT	6" PVC	SEE NOTE 2
808 FRONT STREET	12+21.1, 14.5 RT	6" PVC	SEE NOTES 1-3
814 FRONT STREET	12+98.0, 19.2 RT	6" PVC	SEE NOTES 1-3
825 FRONT STREET	13+40.4, 17.1 LT	6" PVC	SEE NOTES 1-3
816 FRONT STREET	13+57.0,19.8 RT	6" PVC	SEE NOTES 1-3
827 FRONT STREET	13+67.2, 20.4 LT	6" PVC	SEE NOTES 1-3
820 FRONT STREET	14+03.7, 19.8 RT	6" PVC	SEE NOTES 1-3
103 BRADLEY STREET	14+17.6, 21.4 LT	6" PVC	SEE NOTES 1-3
824 FRONT STREET	14+59.8, 20.8 RT	6" PVC	SEE NOTE 2
903 FIRST STREET	15+07.7, 21.6 LT	6" PVC	SEE NOTES 1-3
LOT 1 DOCK STREET	15+29.8, 21.4 RT	6" PVC	SEE NOTES 1-3
106 DOCK STREET	15+38.1, 21.4 RT	6" PVC	SEE NOTES 1-3

NOTES:

- SEWER SERVICE LOCATIONS SHOWN ARE FROM LIMITED AS-BUILT INFORMATION AND WERE NOT FIELD LOCATED. CONTRACTOR SHALL FIELD LOCATE ALL SEWER SERVICES TO CONFIRM FINAL LOCATION FOR NEW SEWER SERVICE CLEANOUT INSTALLATION.
- CONSTRUCT NEW 6" PVC SEWER SERVICE AND INSTALL NEW CLEANOUT NEAR PROPERTY LINE PER CBJ STANDARD DETAIL 213, CTE.
- PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.

SUMMARY TABLES



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FRONT STREET DOUGLAS
RECONSTRUCTION
CBJ CONTRACT No. E16-133

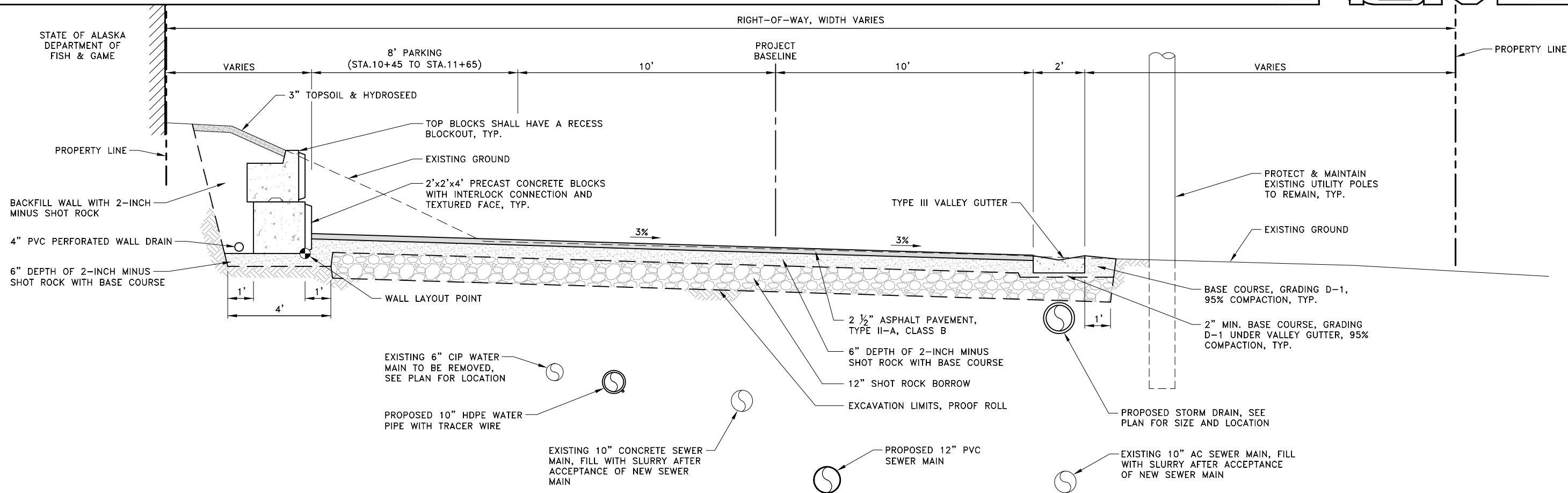
CITY & BOROUGH OF JUNEAU, ALASKA

DATE: FEB 19, 2016
R&M NO. 15138JN

SHEET
C004

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No.	DATE	REVISION	BY	APRVD.



1 FRONT STREET TYPICAL SECTION - STA 10+40 TO STA 11+65
N.T.S.
SEE SHEET C200 FOR INFORMATION ON RESURFACING
OF SAVIKKO ROAD INTERSECTION

TYPICAL SECTION NOTES

- SIDE SLOPES, WIDTHS AND GRADES MAY VARY AT SOME LOCATIONS, SEE PLAN VIEW SHEETS FOR ADDITIONAL INFORMATION.
- UNDERGROUND SEWER, WATER AND STORM SEWER SERVICES NOT SHOWN FOR CLARITY. SEE PLAN VIEW SHEETS FOR APPROXIMATE LOCATIONS.
- ADDITIONAL EXCAVATION BELOW THE NEATLINE SUBCUT LEVEL MAY BE REQUIRED BY THE ENGINEER IF ORGANIC OR OTHER UNSUITABLE MATERIALS ARE FOUND AT OR NEAR THE PLANNED SUBCUT LEVEL. USABLE MATERIAL FROM EXCAVATION SHALL BE USED TO BACKFILL THE ADDITIONAL AREAS OF EXCAVATION. BACKFILLING WITH USABLE MATERIAL FROM EXCAVATION WILL BE CONSIDERED INCIDENTAL TO OTHER WORK.
- REMOVE AND DISPOSE OF EXISTING STORM DRAIN, SANITARY SEWER, AND WATER PIPES THAT ARE BEING REPLACED, UNLESS NOTED OTHERWISE.
- DRIVEWAYS DISTURBED DURING CONSTRUCTION SHALL BE RECONSTRUCTED TO EQUAL OR BETTER CONDITION WITH SUBGRADE REPLACED IN LAYERS TO MATCH THOSE REMOVED, EXCEPT:
 - EXISTING ASPHALT PAVED DRIVEWAYS DISTURBED DURING CONSTRUCTION SHALL BE SUBCUT TO 8-INCHES BELOW FINISH GRADE AND REPLACED WITH 6-INCHES OF 2" MINUS SHOT ROCK W/ BASE COURSE, GRADING D-1 AND 2-INCHES OF ASPHALT PAVEMENT, TYPE II-A, CLASS B.
 - CONCRETE DRIVEWAYS SHALL BE SUBCUT TO 12-INCHES BELOW FINISH GRADE AND REPLACED WITH 6-INCHES OF 2" MINUS SHOT ROCK W/ BASE COURSE, GRADING D-1 AND 6-INCHES OF CONCRETE.
 - EXISTING GRAVEL DRIVEWAYS DISTURBED DURING CONSTRUCTION SHALL BE SUBCUT TO 4-INCHES BELOW FINISH GRADE AND REPLACED WITH 4-INCHES OF BASE COURSE, GRADING D-1.
 - ORGANICS, ROOTS, WOOD OR OTHER DELETERIOUS MATERIALS ENCOUNTERED IN THE DRIVEWAYS DURING EXCAVATION OPERATIONS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AND DISPOSED OF AT AN APPROVED OFFSITE DISPOSAL SITE. BACKFILL VOIDS BELOW THE REQUIRED SUBCUT LAYER WITH USABLE EXCAVATION.
- THE BASE COURSE LAYER SHALL BE 4" TO 5" OF 2-INCH MINUS SHOT ROCK WITH 1" TO 2" TOP LAYER OF BASE COURSE, GRADING D-1 FOR A TOTAL COMPACTED THICKNESS OF 6". THE 2-INCH MINUS SHOT ROCK SHALL BE WELL COMPACTED PRIOR TO PLACING BASE COURSE, GRADING D-1. THIS APPLIES TO ALL TYPICAL SECTIONS FOR THIS PROJECT.
- CONSTRUCT HYDRANT ACCESS PAD AND SEWER APRON AS FOLLOWS:
 - EXCAVATE TO 8" BELOW FINISH GRADE TO CONSTRUCTION LIMITS.
 - PLACE A 6" DEPTH OF 2-INCH MINUS SHOT ROCK WITH BASE COURSE TO SHOULDER LIMITS.
 - SURFACE WITH A 2" LAYER OF ASPHALT PAVEMENT.
- ASPHALT APRONS FOR GRAVEL DRIVEWAYS SHALL BE PAVED SIMULTANEOUSLY WITH THE ROADWAY PAVING.
- TOP OF PAVEMENT GRADES GIVEN ON THE PLANS ARE ACTUAL FINISHED PAVEMENT SURFACE ELEVATIONS. TOP OF A.C. PAVEMENT ALONG NEW CONCRETE GUTTERS SHALL BE FINISHED 1/4-INCH ABOVE THE LIP OF GUTTER.
- THE LIMITS OF USABLE MATERIAL AND TOPSOIL OUTSIDE THE STRUCTURAL SECTION WILL VARY IN DISTANCE FROM RIGHT-OF-WAY LINES. PLACE AND GRADE THESE MATERIALS TO PROVIDE A SMOOTH, WELL-DRAINED TRANSITION TO EXISTING GRADES, AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL NOTES

- TRAFFIC CONTROL SHALL MEET THE REQUIREMENTS OF THE ALASKA TRAFFIC MANUAL (U.S. DEPARTMENT OF TRANSPORTATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" WITH THE ALASKA SUPPLEMENT).
- ALL DETOURS AND ROAD CLOSURES SHALL BE AS APPROVED BY THE ENGINEER.
- PROVIDE ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES.
- TANNER'S SERVICE CENTER IS LOCATED WITHIN THE PROJECT LIMITS; THE CONTRACTOR IS REQUIRED TO COORDINATE WITH THE OWNER ON ALLOWING TRUCK AND BOAT TRAILER ACCESS TO THE SERVICE CENTER DURING BUSINESS HOURS. TANNER'S SERVICE CENTER SUMMER HOURS (APRIL 1 THROUGH SEPTEMBER 30) ARE TUESDAY - FRIDAY 9:00 AM TO 6:00 PM, SATURDAY 9:30 AM TO 3:00 PM, CLOSED SUNDAY AND MONDAY.
- PEDESTRIAN TRAFFIC SHALL BE MAINTAINED ALONG AT LEAST ONE SIDE OF THE STREET AT ALL TIMES. THE PEDESTRIAN PATHWAY SHALL BE CLEARLY MARKED AND SHALL SATISFY THE REQUIREMENTS AS DESCRIBED IN THE SPECIAL PROVISIONS.

PAVING SEQUENCE REQUIREMENTS

- LAYDOWN OPERATIONS SHALL BE CONDUCTED IN A MANNER THAT ENSURES THE MINIMUM TEMPERATURE ALONG THE CENTERLINE EDGE OF THE FIRST PAVED LANE DOES NOT FALL BELOW 200° FAHRENHEIT BEFORE THE SECOND PAVED LANE IS PLACED AGAINST THIS EDGE.
- THE CONTRACTOR SHALL MONITOR THE TEMPERATURE OF THE CENTERLINE EDGE OF THE FIRST PAVED LANE AND MOVE THE LAYDOWN OPERATIONS OVER TO THE SECOND LANE ALLOWING SUFFICIENT TIME FOR THE PAVEMENT OF THE SECOND LANE TO COVER THE CENTERLINE EDGE OF THE FIRST LANE PRIOR TO COOLING TO LESS THAN 200° FAHRENHEIT.

TYPICAL SECTIONS



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**FRONT STREET DOUGLAS
RECONSTRUCTION**
CBJ CONTRACT No. E16-133

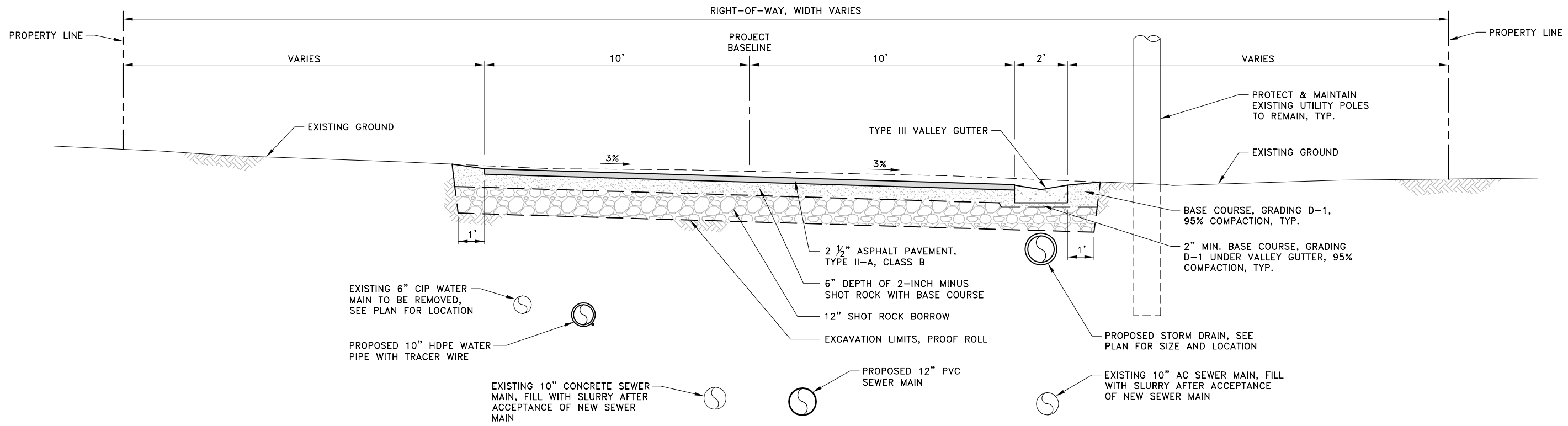
CITY & BOROUGH OF JUNEAU, ALASKA

DATE: FEB 19, 2016
R&M NO. 15138JN

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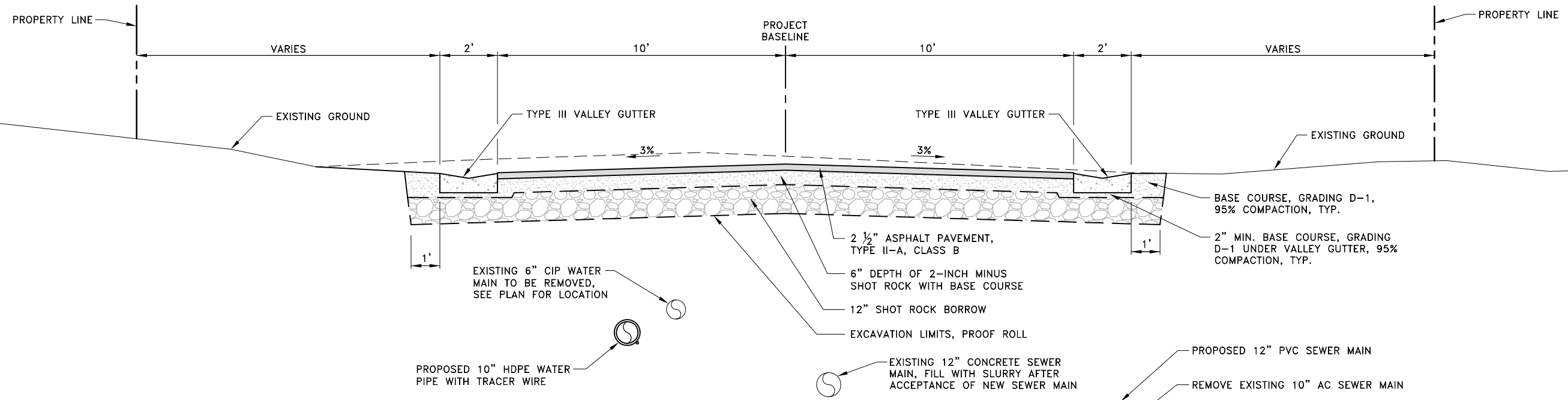
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No.	DATE	REVISION	BY	APRVD.



1 FRONT STREET TYPICAL SECTION - STA 11+65 TO STA 14+04
N.T.S.

NOTE: TYPICAL SECTION TRANSITIONS THROUGH INTERSECTION FROM STA 14+04 THROUGH 15+37, SEE PLAN VIEWS FOR PAVEMENT WIDTHS AND GUTTER LOCATIONS.



2 FRONT STREET TYPICAL SECTION - STA 15+37 TO STA 15+90
N.T.S.

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No.	DATE	REVISION	BY	APRVD.

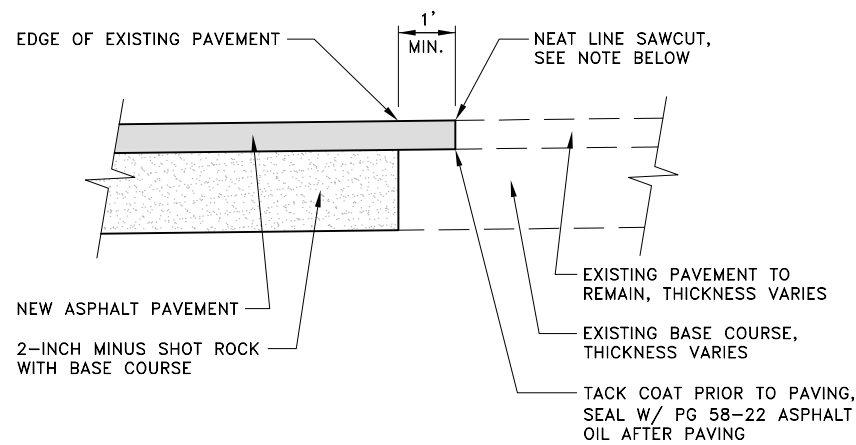
TYPICAL SECTIONS



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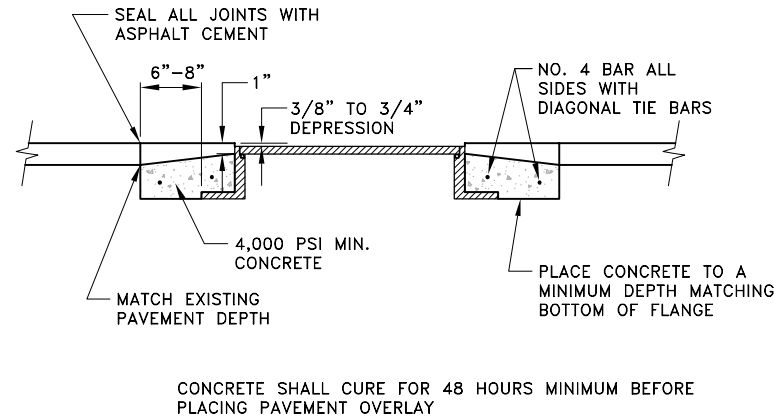
FRONT STREET DOUGLAS RECONSTRUCTION
CBJ CONTRACT No. E16-133
CITY & BOROUGH OF JUNEAU, ALASKA

DATE: FEB 19, 2016
R&M NO. 15138JN
SHEET C101



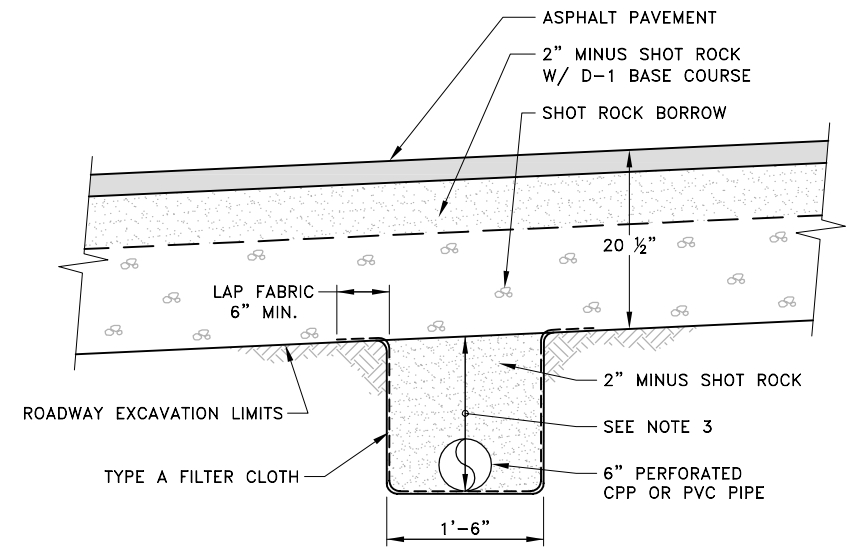
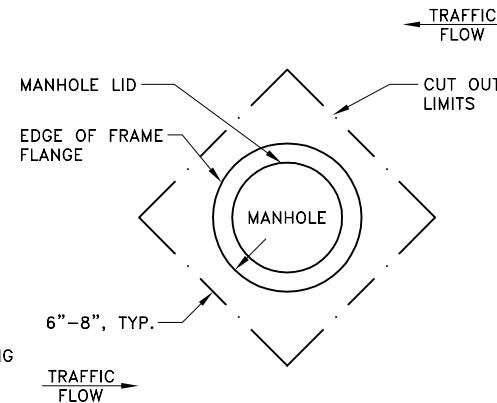
NOTE:
SAWCUT OF EXISTING PAVEMENT SHALL NOT BE MADE UNTIL 24 HOURS PRIOR TO FINAL PAVING.

1 PAVEMENT MATCH JOINT DETAIL
N.T.S.



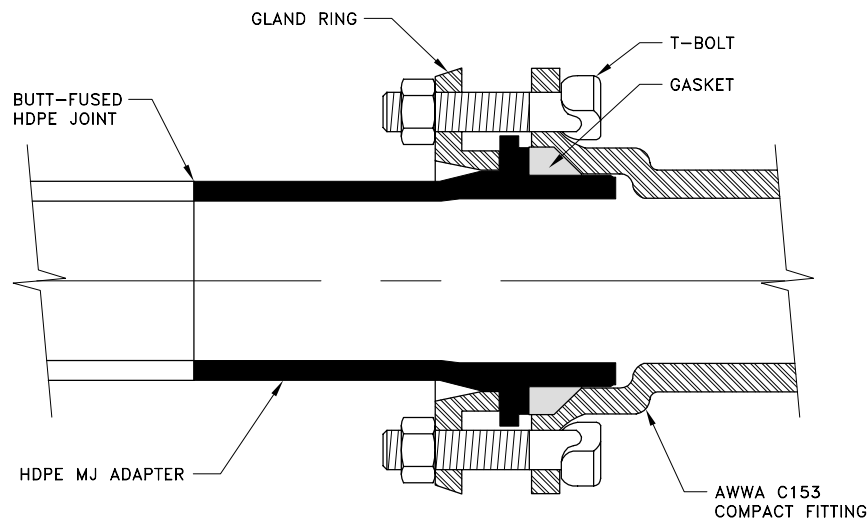
NOTE:
MANHOLE FRAME SHALL BE RAISED TO FINISH GRADE PRIOR TO PAVING OPERATIONS. IF NOT WITHIN ALLOWABLE TOLERANCES AFTER PAVING OPERATION THE ABOVE DETAILS SHALL BE USED.

2 CONCRETE TRANSITION SLAB DETAILS
N.T.S.

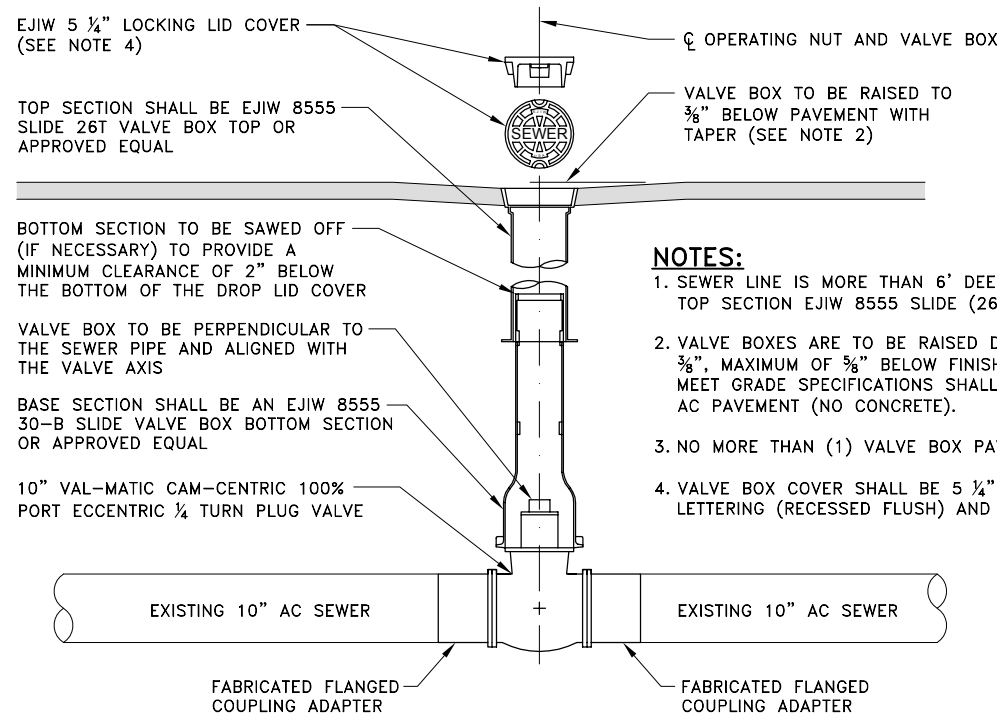


NOTES:
1. OUTFALL CONNECTIONS WILL BE EITHER INTO CATCH BASINS OR CPP SADDLE TEES.
2. UPPER END OF PIPES SHALL BE CAPPED AND THE FILTER CLOTH FOLDED AND OVERLAPPED TO SEAL END OF DRAINAGE ROCK SECTION.
3. DEPTH WILL VARY FROM 12" TO 30" AS DETERMINED BY THE ENGINEER.

3 6" UNDERDRAIN DETAIL
N.T.S.



NOTES:
1. SEWER LINE IS MORE THAN 6' DEEP, USE 4" ID CAST IRON SOIL PIPE WITH TOP SECTION EJIW 8555 SLIDE (26T OR 16T) VALVE BOX.
2. VALVE BOXES ARE TO BE RAISED DURING PAVING OPERATIONS A MINIMUM OF 3/8", MAXIMUM OF 3/8" BELOW FINISHED PAVEMENT. VALVE BOXES THAT DO NOT MEET GRADE SPECIFICATIONS SHALL BE SAWCUT, RAISED TO GRADE WITH 4" AC PAVEMENT (NO CONCRETE).
3. NO MORE THAN (1) VALVE BOX PAVING RISER IS ALLOWED PER VALVE.
4. VALVE BOX COVER SHALL BE 5 1/4" LOCKING LID TYPE WITH 1" RAISED LETTERING (RECESSED FLUSH) AND (2) CLOSED PICK HOLES.



4 TYPICAL HDPE MJ CONNECTION TO DI FITTING
N.T.S.

5 SEWER DIVERSION VALVE DETAIL
N.T.S.

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CONSTRUCTION DETAILS



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FRONT STREET DOUGLAS RECONSTRUCTION
CBJ CONTRACT No. E16-133
CITY & BOROUGH OF JUNEAU, ALASKA

DATE:	FEB 19, 2016
R&M NO.	15138JN
SHEET	C102

EXIST. SSMH	M13
STA 11+16.06,	12.79' RT
EXIST. LID EL=	29.98
N 10" AC (OUT) IE=	19.03
SE 6" PVC (IN) IE=	23.38
S 8" PVC (IN) IE=	19.08

EXIST. SSMH	M14
STA 10+16.27,	6.78' LT
EXIST. LID EL=	33.46
N 10" CONC (OUT) IE=	26.86
S 6" PVC (IN) IE=	27.06
SW 10" AC (IN) IE=	27.06

EXIST. SSMH	M14.1
STA 10+42.79,	31.41' RT
EXIST. LID EL=	30.64
N 6" PVC (OUT) IE=	25.64
E 6" PVC (IN) IE=	25.64
SW 6" PVC (IN) IE=	25.64

SSMH-1	TYPE-I MH
STA 10+23.40,	2.82 RT
LID EL=	32.60
SP-1 (IN) IE=	26.44
SP-2 (OUT) IE=	26.36

SSMH-2	TYPE-I MH
STA 11+07.00,	16.81 RT
LID EL=	30.00
EXIST. 8" PVC (IN) IE=	*19.10
SP-2 (IN) IE=	19.10
SP-3 (OUT) IE=	19.06

SSMH-3	*TYPE-I MH
STA 11+62.87,	1.94 RT
LID EL=	29.60
SP-3 (IN) IE=	18.84
SP-4 (IN) IE=	18.96
SP-5 (OUT) IE=	18.80

* W/ FIBERGLASS BASE LINER

SANITARY SEWER PIPE SUMMARY

PIPE	DIA.	LENGTH	TYPE	SLOPE
SP-1	10"	15'	PVC	4.13%
SP-2	10"	85'	PVC	8.54%
SP-3	12"	58'	PVC	0.38%
SP-4	10"	25'	PVC	*
SP-5	12"	333'	PVC	0.40%

NOTE: PIPE LENGTHS AND SLOPES ARE MEASURED AND CALCULATED FROM CENTER TO CENTER OF STRUCTURES, UON.

* SLOPE TO BE FIELD DETERMINED

S-1	CB TYPE-III
STA 11+55.00,	11.00 RT
GRATE FL EL=	29.27
6" PVC IE=	27.00
6" UD IE=	27.00
P-1 IE=	26.75
SUMP=	16" MIN.

S-2	CB TYPE-III
STA 12+71.00,	11.00 RT
GRATE FL EL=	27.55
6" PVC IE=	25.15
P-1 IE=	24.98
P-2 IE=	24.90
SUMP=	16" MIN.

STORM DRAIN PIPE SUMMARY

PIPE	DIA.	LENGTH	TYPE	SLOPE
P-1	12"	116'	CPP	1.53%

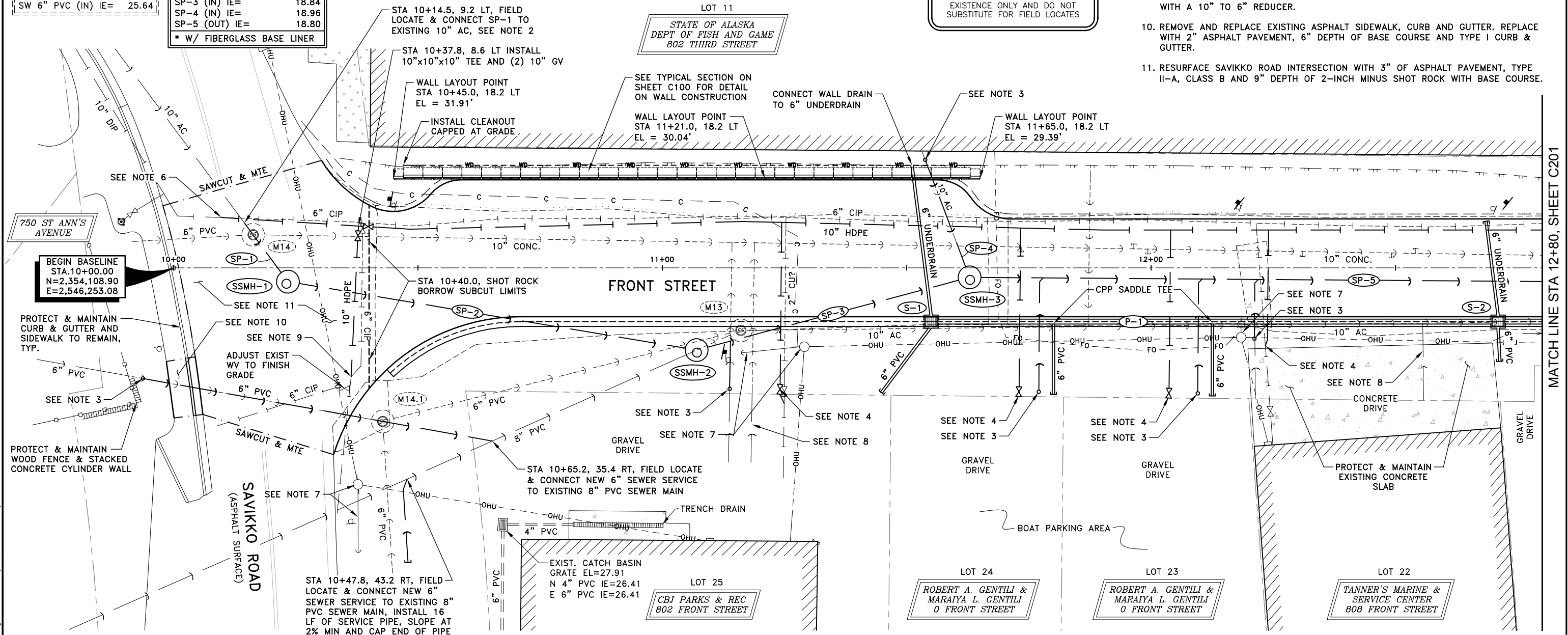
NOTE: PIPE LENGTHS AND SLOPES ARE MEASURED AND CALCULATED FROM CENTER TO CENTER OF STRUCTURES, UON.

DIAL BEFORE YOU DIG!
586-1333

U/G POWER, TELEPHONE & T.V.
SHOWN ON THIS DRAWING INDICATE
EXISTENCE ONLY AND DO NOT
SUBSTITUTE FOR FIELD LOCATES

NOTES:

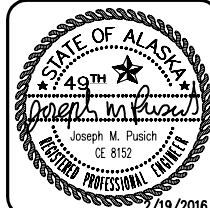
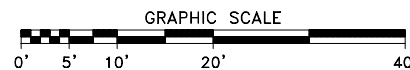
- CATCH BASIN STATIONS AND OFFSETS ARE GIVEN TO THE CENTER OF THE STRUCTURE. GRATE ELEVATIONS ARE GIVEN TO THE FLOW LINE OF THE GRATE.
- PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
- INSTALL NEW SEWER SERVICE, SEE SUMMARY ON SHEET C004.
- INSTALL NEW WATER SERVICE, SEE SUMMARY ON SHEET C004.
- RELOCATE UNDERGROUND UTILITIES IF FOUND TO BE IN CONFLICT WITH PROPOSED STORM DRAIN PIPES AND STRUCTURES.
- STA 10+09.8, 10.3 LT, FIELD LOCATE AND REMOVE EXISTING 10" TO 6" DI REDUCER, BEGIN NEW 10" HDPE WATER LINE.
- PROTECT AND MAINTAIN EXISTING UTILITY POLE AND ANCHOR WIRES.
- CONTRACTOR SHALL CONFIRM EXISTING SEWER SERVICE IS NO LONGER ACTIVE PRIOR TO ABANDONING.
- STA 10+36.3, 22.3 RT, FIELD LOCATE AND CONNECT TO EXISTING 6" CI WATER LINE WITH A 10" TO 6" REDUCER.
- REMOVE AND REPLACE EXISTING ASPHALT SIDEWALK, CURB AND GUTTER. REPLACE WITH 2" ASPHALT PAVEMENT, 6" DEPTH OF BASE COURSE AND TYPE I CURB & GUTTER.
- RESURFACE SAVIKKO ROAD INTERSECTION WITH 3" OF ASPHALT PAVEMENT, TYPE II-A, CLASS B AND 9" DEPTH OF 2-INCH MINUS SHOT ROCK WITH BASE COURSE.



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PLAN VIEW
STA 10+00 to STA 12+80



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**FRONT STREET DOUGLAS
RECONSTRUCTION**
CBJ CONTRACT No. E16-133

CITY & BOROUGH OF JUNEAU, ALASKA

DATE: FEB 19, 2016
R&M NO. 15138JN
SHEET
C200

S-3	SDMH TYPE-I
STA 13+34.00,	11.00 RT
GRATE FL EL=	26.61
6" PVC IE=	23.24
P-2 IE=	23.08
P-3 IE=	22.91
P-4 IE=	22.83
SUMP=	16" MIN.

S-4	CB TYPE-IV*
STA 13+17.69,	14.33 LT
GRATE EL=	27.64
EXIST. 6" PVC IE=	25.34
EXIST. 18" CPP IE=	24.94
P-3 IE=	23.81
SUMP=	16" MIN.
* W/ CONCRETE AREA DRAIN	
CONNECT EXISTING 18" CPP AND 6" PVC TO S-4	

S-5	SDMH TYPE-I
STA 14+12.85,	11.00 RT
GRATE FL EL=	25.50
6" PVC IE=	22.60
6" UD IE=	22.60
P-4 IE=	22.43
P-8 IE=	22.60
P-5 IE=	22.35
SUMP=	16" MIN.

S-6	CB TYPE-III
STA 15+37.50,	11.00 LT
GRATE FL EL=	25.77
6" PVC IE=	23.28
P-9 IE=	23.03
P-6 IE=	22.95
SUMP=	16" MIN.

S-7	CB TYPE-III
STA 15+25.71,	13.24 RT
GRATE FL EL=	25.43
6" PVC IE=	22.85
P-6 IE=	22.68
P-7 IE=	22.60
SUMP=	16" MIN.

S-8	CB TYPE-IV
STA 14+12.85,	11.00 LT
GRATE FL EL=	26.10
6" PVC IE=	23.87
6" UD IE=	23.70
P-8 IE=	23.37
SUMP=	16" MIN.

S-9	CB TYPE-III
STA 15+00.83,	16.76 LT
GRATE FL EL=	26.70
6" UD IE=	24.25
P-9 IE=	24.00
SUMP=	16" MIN.

SSMH-4	**TYPE-I MH
STA 14+92.78,	10.89 RT
LID EL=	25.84
W 8" PVC (IN) IE=	*18.91
E 8" PVC (IN) IE=	18.01
SP-5 (IN) IE=	17.47
SP-6 (OUT) IE=	17.43
* INSTALL DROP CONNECTION	
** W/ FIBERGLASS BASE LINER	

SSMH-5	TYPE-I MH
STA 15+70.81,	6.41 RT
LID EL=	26.27
SP-7 (IN) IE=	19.60
SP-8 (OUT) IE=	19.52

SSMH-6	**TYPE-I MH
STA 15+73.94,	15.36 RT
LID EL=	26.25
SP-6 (IN) IE=	17.09
SP-8 (IN) IE=	*19.16
NE 10" AC (OUT) IE=	17.04
NW 12" AC (OUT) IE=	17.04
* INSTALL DROP CONNECTION	
** W/ FIBERGLASS BASE LINER	
CONNECT EXISTING NE & NW PIPES TO SSMH-6	

SANITARY SEWER PIPE SUMMARY				
PIPE	DIA.	LENGTH	TYPE	SLOPE
SP-6	12"	84'	PVC	0.40%
SP-7	10"	14'	PVC	0.50%
SP-8	10"	9'	PVC	4.00%

NOTE: PIPE LENGTHS AND SLOPES ARE MEASURED AND CALCULATED FROM CENTER TO CENTER OF STRUCTURES, UON.

STORM DRAIN PIPE SUMMARY				
PIPE	DIA.	LENGTH	TYPE	SLOPE
P-2	12"	63'	CPP	2.89%
P-3	18"	30'	CPP	3.00%
P-4	18"	79'	CPP	0.51%
P-5	18"	74'	CPP	0.50%
P-6	12"	27'	CPP	1.00%
P-7	12"	47'	CPP	1.32%
P-8	12"	22'	CPP	3.50%
P-9	12"	37'	CPP	2.62%

NOTE: PIPE LENGTHS AND SLOPES ARE MEASURED AND CALCULATED FROM CENTER TO CENTER OF STRUCTURES, UON.

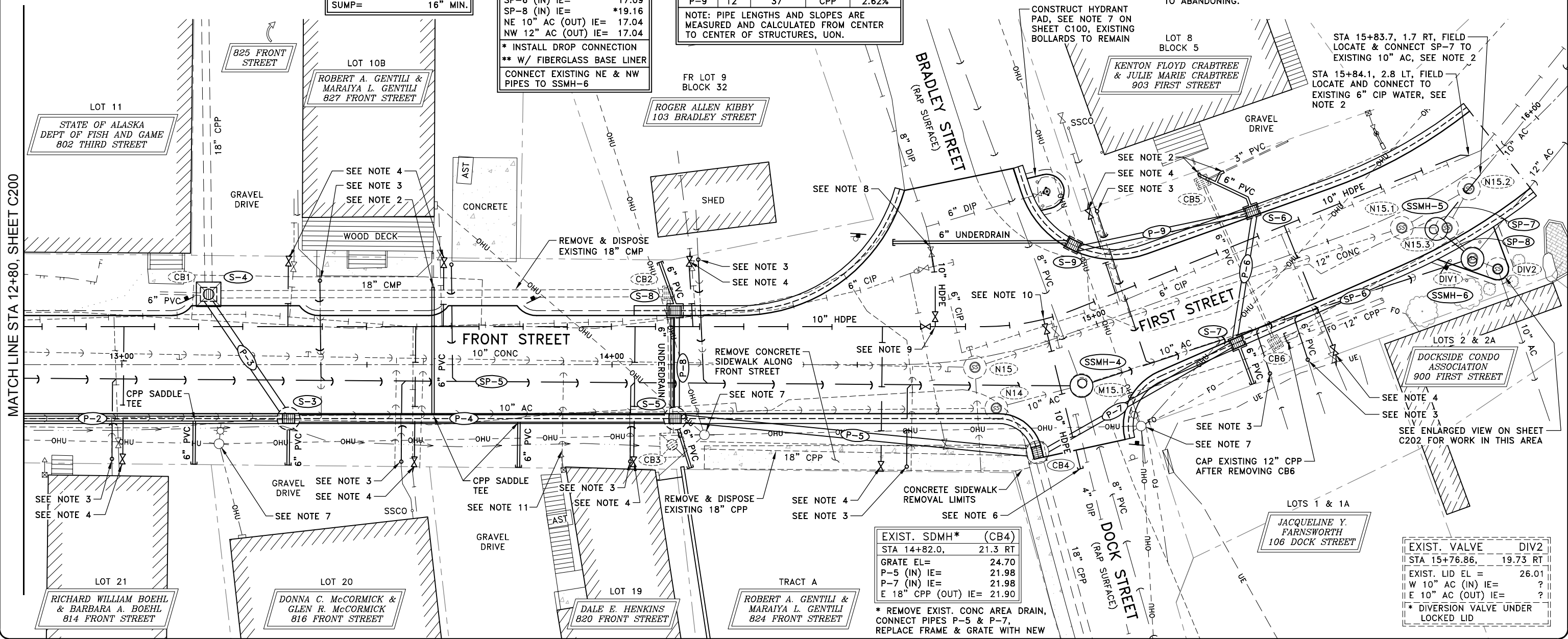
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586-1333

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EXISTING UTILITY NOTE:
SEE SHEET C202 FOR SUMMARY TABLES FOR INFORMATION ON SANITARY SEWER & STORM DRAIN STRUCTURES THAT ARE TO BE REMOVED

NOTES:

- CATCH BASIN STATIONS AND OFFSETS ARE GIVEN TO THE CENTER OF THE STRUCTURE. GRATE ELEVATIONS ARE GIVEN TO THE FLOW LINE OF THE GRATE.
- PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
- INSTALL NEW SEWER SERVICE, SEE SUMMARY ON SHEET C004.
- INSTALL NEW WATER SERVICE, SEE SUMMARY ON SHEET C004.
- RELOCATE UNDERGROUND UTILITIES IF FOUND TO BE IN CONFLICT WITH PROPOSED STORM DRAIN PIPES AND STRUCTURES.
- STA 14+88.1, 26.9 RT, END 10" HDPE WATER AND INSTALL CAP.
- PROTECT AND MAINTAIN EXISTING UTILITY POLE AND ANCHOR WIRES.
- STA 14+67.0, 23.7 LT REMOVE EXISTING 8" GV AND BEGIN 10" HDPE WATER LINE INSTALLATION, SEE NOTE 2.
- STA 14+66.5, 7.4 LT, INSTALL 10"x10"x10" TEE AND (2) 10" GV.
- STA 14+90.0, 4.5 LT, INSTALL 10"x10"x10" TEE AND (1) 10" GV.
- CONTRACTOR SHALL CONFIRM EXISTING SEWER SERVICE IS NO LONGER ACTIVE PRIOR TO ABANDONING.



EXIST. SDMH*	(CB4)
STA 14+82.0,	21.3 RT
GRATE EL=	24.70
P-5 (IN) IE=	21.98
P-7 (IN) IE=	21.98
E 18" CPP (OUT) IE=	21.90

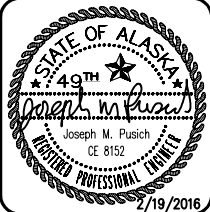
* REMOVE EXIST. CONC AREA DRAIN, CONNECT PIPES P-5 & P-7, REPLACE FRAME & GRATE WITH NEW

EXIST. VALVE	DIV2
STA 15+76.86,	19.73 RT
EXIST. LID EL =	26.01
W 10" AC (IN) IE=	?
E 10" AC (OUT) IE=	?
* DIVERSION VALVE UNDER LOCKED LID	

DESIGN	JMP
DRAWN	KAP/JAG
CHECK	JMP
APPROVED	JMP
FILE:	

No.	DATE	REVISION	BY	APPRD.

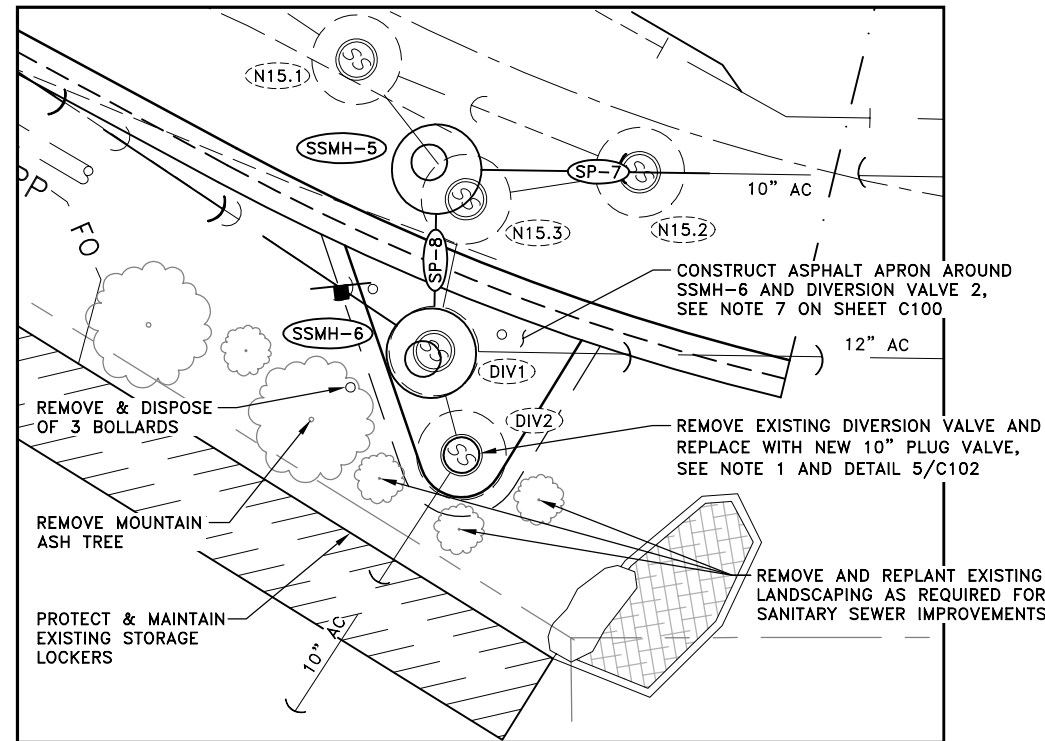
PLAN VIEW
STA 12+80 to STA 16+00



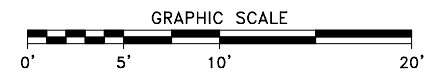
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rmengineering@rmjuneau.com

FRONT STREET DOUGLAS RECONSTRUCTION
CBJ CONTRACT No. E16-133
CITY & BOROUGH OF JUNEAU, ALASKA

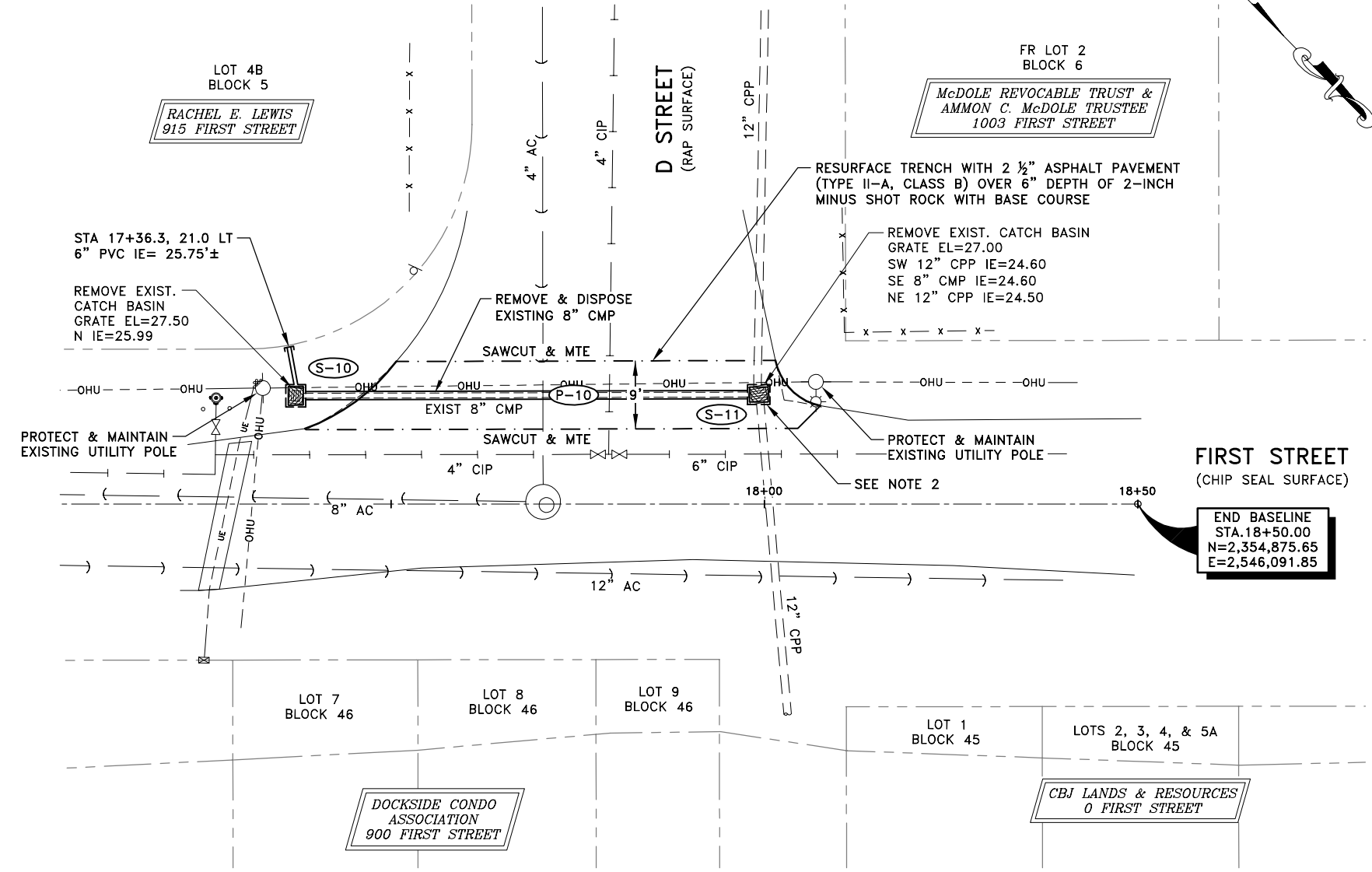
DATE:	FEB 19, 2016
R&M NO.	15138JN
SHEET	C201



ENLARGED PLAN VIEW



EXIST. SSMH DIV1 STA 15+74.02, 15.20 RT EXIST. LID EL= 27.99 NW 12" AC (OUT) IE= 17.04 NE 10" AC (OUT) IE= 17.04 S 10" AC (IN) IE= 17.09 W 10" AC (IN) IE= 17.09	EXIST. SSMH* N15.1 STA 15+64.87, 3.01 RT EXIST. LID EL= *? NW 10" AC (IN) IE= ? NE 10" AC (OUT) IE= ? S 12" CI (IN) IE= ? * LID PAVED OVER	EXIST. SDMH (CB1) STA 13+17.7, 14.3 LT GRATE EL= 27.64 W 18" CPP IE= 24.94 N 18" CMP IE= 24.84 S 6" PVC IE= 25.34
EXIST. SSMH M15.1 STA 14+93.55, 10.23 RT EXIST. LID EL= 25.31 N 10" AC (OUT) IE= 17.73 E 8" PVC (IN) IE= 18.01 S 10" AC (IN) IE= 17.81 W 8" PVC (IN) IE= 18.91	EXIST. SSMH N15.2 STA 15+80.34, 2.75 RT EXIST. LID EL= 26.37 N 10" AC (IN) IE= 19.67 SE 6" AC (IN) IE= 19.67 S 10" AC (OUT) IE= 19.67	EXIST. CB (CB2) STA 14+11.5, 14.6 LT GRATE EL= 26.20 S 18" CMP IE= 24.63 E 8" CMP IE= 24.00
EXIST. SSMH N14 STA 14+75.22, 9.42 RT EXIST. LID EL= 25.53 N 10" AC (OUT) IE= 17.75 S 10" AC (IN) IE= 17.83	EXIST. SSMH N15.3 STA 15+72.71, 7.25 RT EXIST. LID EL= 26.24 NW 6" AC (IN) IE= 19.75 NE 10" AC (OUT) IE= 17.10 SW 10" AC (IN) IE= 17.23	EXIST. SDMH (CB3) STA 14+12.2, 16.4 RT GRATE EL= 25.89 W 8" CMP IE= 23.02 E 18" CPP IE= 23.09
EXIST. SSMH N15 STA 14+74.02, 0.55 RT EXIST. LID EL= 26.51 N 12" CI (OUT) IE= 18.11 E 6" PVC (IN) IE= 18.28 S 12" CI (IN) IE= 18.41 W 6" PVC (IN) IE= 18.41		EXIST. CB (CB5) STA 15+30.0, 20.0 LT GRATE EL= 26.18 W 3" PVC IE= 23.90 N 3" PVC IE= 24.97 E 6" PVC IE= 23.93
		EXIST. CB (CB6) STA 15+33.0, 16.0 RT GRATE EL= 25.52 W 6" CPP IE= 23.42 N 12" CPP IE= 23.37



- NOTES:**
- PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
 - CONNECT EXISTING 12" CPP PIPES THAT ARE TO REMAIN TO NEW CATCH BASIN.

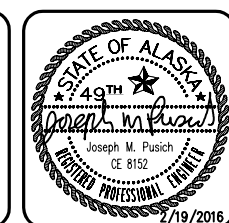
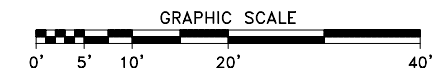
S-10	CB TYPE-III
STA 17+37.24,	14.50 LT
FRAME EL=	27.40
P-10 IE=	25.22
6" PVC IE=	25.47
SUMP=	16" MIN.

S-11	CB TYPE-III
STA 17+99.24,	14.65 LT
FRAME EL=	27.00
P-10 IE=	24.60
EXIST. 12" (IN) IE=	24.60
EXIST. 12" (OUT) IE=	24.50
SUMP=	16" MIN.
CONNECT EXISTING 12" CMPS TO S-11	

STORM DRAIN PIPE SUMMARY				
PIPE	DIA.	LENGTH	TYPE	SLOPE
P-10	12"	62'	CPP	1.00%
NOTE: PIPE LENGTHS AND SLOPES ARE MEASURED AND CALCULATED FROM CENTER TO CENTER OF STRUCTURES, UON.				

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PLAN VIEW
 STA 17+05 to STA 18+50



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FRONT STREET DOUGLAS RECONSTRUCTION
 CBJ CONTRACT No. E16-133
 CITY & BOROUGH OF JUNEAU, ALASKA

I:\2015\151374\Drawing\151374_Topo.dwg PLOT: February 19, 2016 at: 2:28pm KevinPuustinen

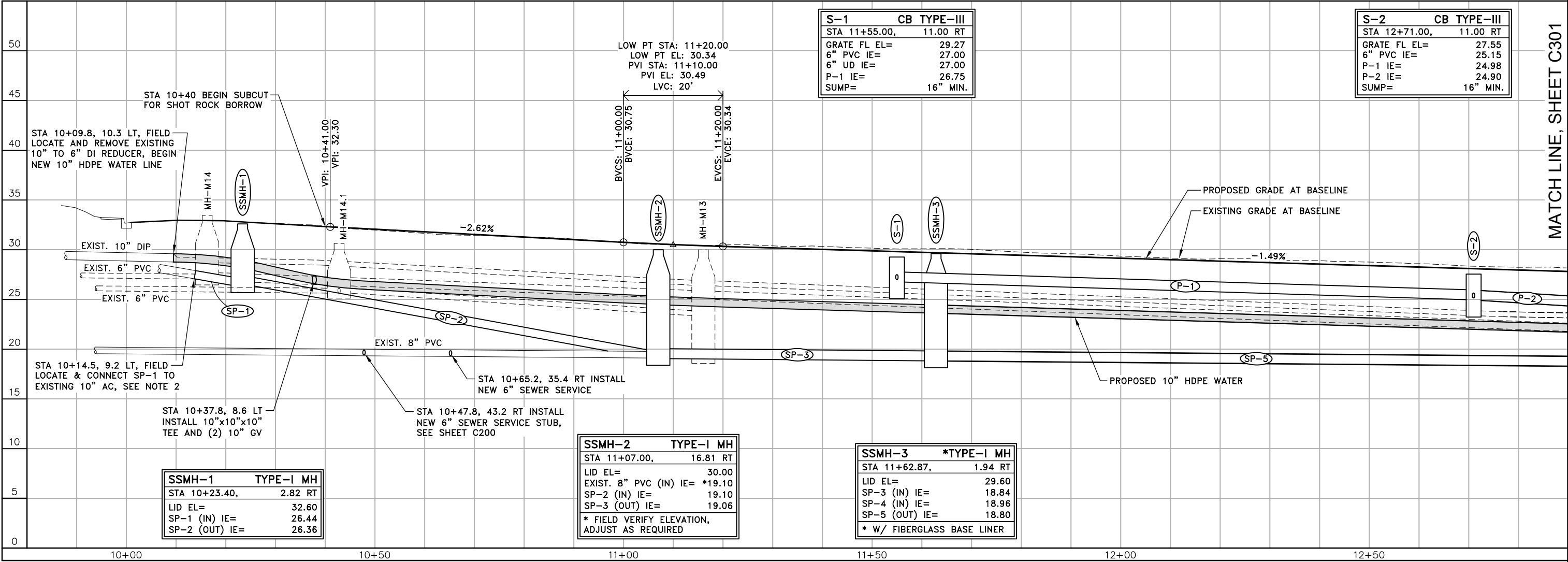
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DRAWN	KAP/JAG					
CHECK	JMP					
APPROVED	JMP					
FILE:						

NOTES:
1. WATER SERVICES, SANITARY SEWER SERVICES, ELECTRICAL CONDUITS, UNDERDRAINS AND COMMUNICATION CONDUITS NOT SHOWN FOR CLARITY, SEE PLAN VIEWS FOR APPROXIMATE LOCATIONS.

EXIST. SSMH	M14
STA 10+16.27,	6.78 LT
EXIST. LID EL=	33.46
N 10" CONC (OUT) IE=	26.86
S 6" PVC (IN) IE=	27.06
SW 10" AC (IN) IE=	27.06

EXIST. SSMH	M14.1
STA 10+42.79,	31.41 RT
EXIST. LID EL=	30.64
N 6" PVC (OUT) IE=	25.64
E 6" PVC (IN) IE=	25.64
SW 6" PVC (IN) IE=	25.64

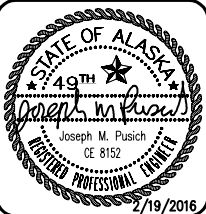
EXIST. SSMH	M13
STA 11+16.06,	12.79 RT
EXIST. LID EL=	29.98
N 10" AC (OUT) IE=	19.03
SE 6" PVC (IN) IE=	23.38
S 8" PVC (IN) IE=	19.08



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FRONT STREET DOUGLAS RECONSTRUCTION
CBJ CONTRACT No. E16-133
CITY & BOROUGH OF JUNEAU, ALASKA

DATE: FEB 19, 2016
R&M NO. 15138JN
SHEET C300



1. WATER SERVICES, SANITARY SEWER SERVICES ELECTRICAL CONDUITS, UNDERDRAINS AND COMMUNICATION CONDUITS NOT SHOWN FOR CLARITY, SEE PLAN VIEWS FOR APPROXIMATE LOCATIONS.
2. STA 15+83.7, 1.7 RT, FIELD LOCATE & CONNECT SP-7 TO EXISTING 10" AC SEWER.
3. STA 15+84.1, 2.8 LT, FIELD LOCATE AND CONNECT TO EXISTING 6" CIP WATER.

SSMH-6 **TYPE-I MH	
STA 15+73.94,	15.36 RT
LID EL=	26.25
SP-6 (IN) IE=	17.09
SP-8 (IN) IE=	*19.16
NE 10" AC (OUT) IE=	17.04
NW 12" AC (OUT) IE=	17.04
* INSTALL DROP CONNECTION	
** W/ FIBERGLASS BASE LINER	
CONNECT EXISTING NE & NW PIPES TO SSMH-6	

EXIST. VALVE	DIV2
STA 15+81.13,	16.93 RT
EXIST. LID EL =	26.01
W 10" AC (IN) IE=	?
E 10" AC (OUT) IE=	?
* DIVERSION VALVE UNDER LOCKED LID	

SSMH-5	TYPE-I MH
STA 15+70.81,	6.41 RT
LID EL=	26.27
SP-7 (IN) IE=	19.60
SP-8 (OUT) IE=	19.52

S-4	CB TYPE-IV*
STA 13+17.69,	14.33 LT
GRATE EL=	27.64
EXIST. 6" PVC IE=	25.34
EXIST. 18" CPP IE=	24.94
P-3 IE=	23.81
SUMP=	16" MIN.
* W/ CONCRETE AREA DRAIN	
CONNECT EXISTING 18" CPP AND 6" PVC TO S-4	

S-3	SDMH TYPE-I
STA 13+34.00,	11.00 RT
GRATE FL EL=	26.61
6" PVC IE=	23.24
P-2 IE=	23.08
P-3 IE=	22.91
P-4 IE=	22.83
SUMP=	16" MIN.

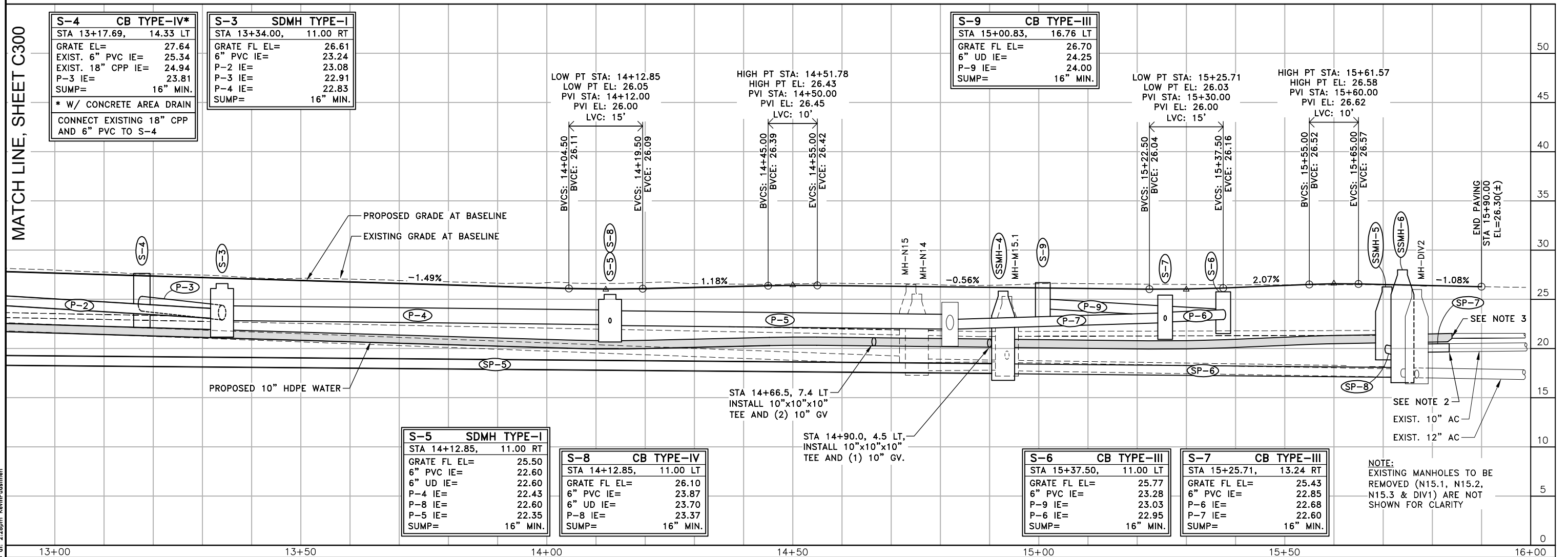
S-9	CB TYPE-III
STA 15+00.83,	16.76 LT
GRATE FL EL=	26.70
6" UD IE=	24.25
P-9 IE=	24.00
SUMP=	16" MIN.

S-5		SDMH TYPE-I
STA 14+12.85,		11.00 RT
GRATE FL EL=		25.50
6" PVC IE=		22.60
6" UD IE=		22.60
P-4 IE=		22.43
P-8 IE=		22.60
P-5 IE=		22.35
SUMP=		16" MIN.

S-8	CB TYPE-IV
STA 14+12.85,	11.00 LT
GRATE FL EL=	26.10
6" PVC IE=	23.87
6" UD IE=	23.70
P-8 IE=	23.37
SUMP=	16" MIN.

S-6	CB TYPE-III
STA 15+37.50,	11.00 LT
GRATE FL EL=	25.77
6" PVC IE=	23.28
P-9 IE=	23.03
P-6 IE=	22.95
SUMP=	16" MIN.

S-7	CB TYPE-III
STA 15+25.71,	13.24 RT
GRATE FL EL=	25.43
6" PVC IE=	22.85
P-6 IE=	22.68
P-7 IE=	22.60
SUMP=	16" MIN.

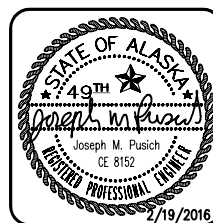
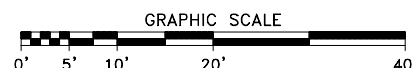


NOTE:
EXISTING MANHOLES TO BE
REMOVED (N15.1, N15.2,
N15.3 & DIV1) ARE NOT
SHOWN FOR CLARITY

DESIGN JMP
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FILE:

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PROFILE VIEW
STA 12+90 to STA 16+00

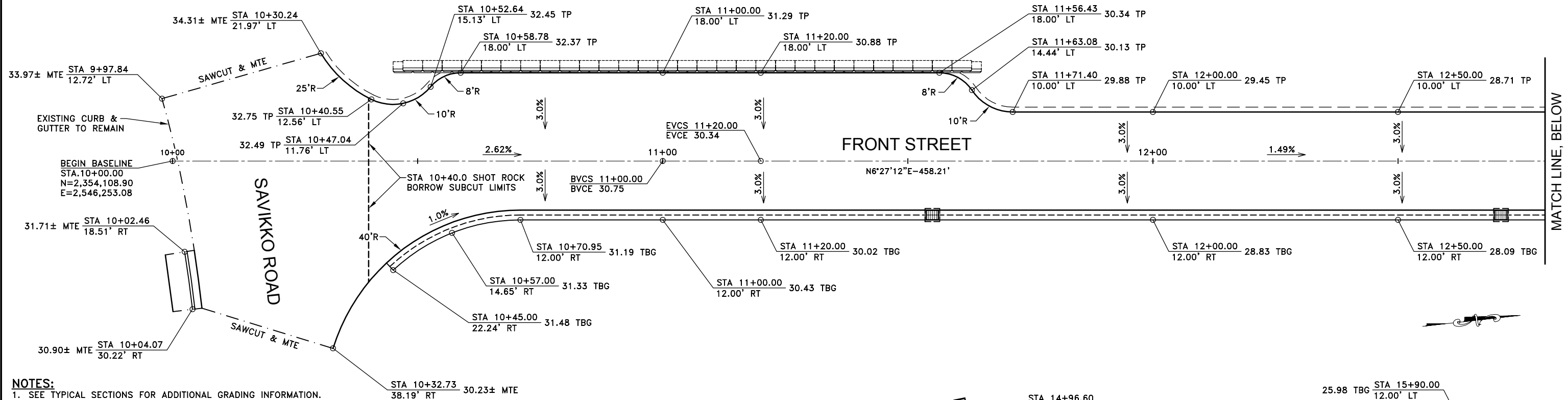


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rmengineering@rmjuneau.com

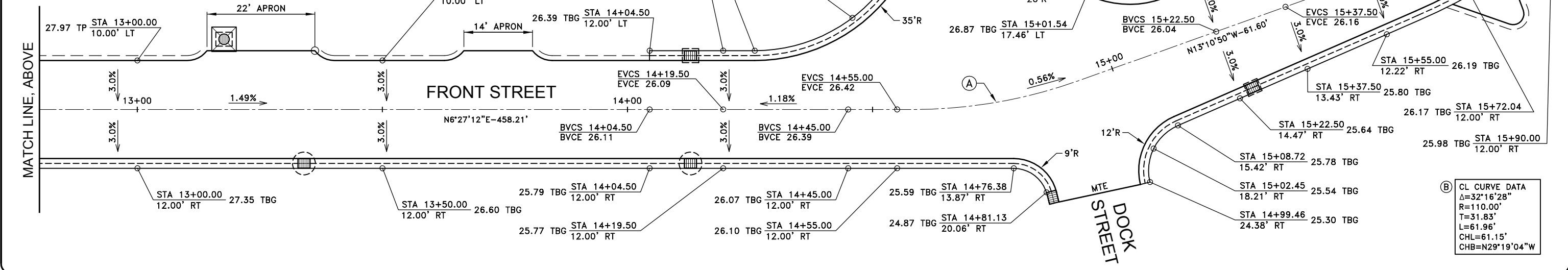
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RECONSTRUCTION
CBI CONTRACT No. E16-133

CITY & BOROUGH OF JUNEAU, ALASKA

DATE:	FEB 19, 2016
&M NO.	15138JN
SHEET C301	



- NOTES:**
- SEE TYPICAL SECTIONS FOR ADDITIONAL GRADING INFORMATION.
 - SLOPES SHOWN ARE FOR LIP OF GUTTER AND FINISHED PAVEMENT.
 - STATION, OFFSET AND ELEVATION INFORMATION ALONG VALLEY GUTTER ARE TO TOP BACK OF VALLEY GUTTER (TBG), UNLESS OTHERWISE NOTED. TOP OF ASPHALT PAVEMENT ARE TP.
 - ESTABLISH VERTICAL CURVES AS NECESSARY FOR A SMOOTH ALIGNMENT (NO ANGLE POINTS) BY VISUALLY ALIGNING TOP OF CURB THROUGH VERTICAL CONTROL POINTS.
 - ALL FORMS FOR CONCRETE SEGMENTS BETWEEN PC'S AND PT'S WITH A RADIUS LESS THAN 200' SHALL BE ARCED TO MATCH THE REQUIRED CURVATURE. NO STRAIGHT FORMS SHALL BE USED WITHIN ANY CURVED SEGMENT WITH A RADIUS OF LESS THAN 200'. STRAIGHT FORMS USED FOR ANY ARCED SEGMENT WITH A RADIUS OF MORE THAN 200' SHALL NOT EXCEED 10' IN LENGTH.
 - PLACE AND COMPACT BASE COURSE, GRADING D-1 TO TRANSITION FROM END OF VALLEY GUTTER TO EXISTING RAP SURFACE.
 - ASPHALT APRONS FOR GRAVEL DRIVEWAYS SHALL BE PAVED SIMULTANEOUSLY WITH THE ROADWAY PAVING.



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